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Demonstrated Reserve Base of U. S. Coals With Potential for Use in the Manufacture of Metallurgical Coke

By William S. Sanner and David C. Benson



UNITED STATES DEPARTMENT OF THE INTERIOR

Public Law 95-91, Department of Energy Organization Act, transferred all data collection, analysis, and dissemination activities related to fossil fuels from the Bureau of Mines to the Department of Energy. The Bureau of Mines has retained an interest in coke, which is a metallurgical reducing agent not a fuel per se, and this report has been published by the Bureau of Mines to complete a series of reports on coal reserves that was undertaken prior to the transfer of this function to the Department of Energy. Readers seeking more information on coke or having questions regarding the contents of this report should contact Francis E. Brantley, Chief, Division of Ferrous Metals, U.S. Bureau of Mines, Columbia Plaza, 2401 E Street, NW., Washington, D.C. 20241 (202-634-1010).

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UNITED STATES DEPARTMENT OF THE INTERIOR
Cecil D. Andrus, Secretary

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AB

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

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PREFACE

This report identifies and quantifies, on the basis of available data, those coals of the U.S. demonstrated coal reserve base that have potential for use in the manufacture of metallurgical coke. Only bituminous coals have been included because only this rank of coal has agglomerating properties.

Coals have been characterized as low-volatile, medium-volatile, and high-volatile A, B, and C bituminous according to American Society for Testing and Materials standard D338. In general, almost all bituminous coals are agglomerating, but the degree to which they will agglomerate declines from the low-volatile, which is strongly agglomerating, to the high-volatile C, which usually is weakly agglomerating. The degree of agglomeration can be determined by a number of empirical tests of which the most prominent is the free-swelling index or crucible-swelling test. Agglomerating test data, however, were not available for many of the bituminous coals known to have agglomerating properties. Therefore, in this report, all bituminous coals were assumed to be agglomerating and suitable for use in varying proportions in coking coal blends.

The characterization as premium, marginal, and latent grades was made entirely on the basis of available analytical data on ash and sulfur in raw coal samples. It is recognized that other impurities in coal will affect coke quality, but, again, existing analytical data were not sufficient to consider such impurities in this evaluation.

Despite these limitations, this report may be found useful in that it identifies coalbeds in the United States with a potential for use in coke manufacture and indicates the relative quality of each bed in each county and State.

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DEMONSTRATED RESERVE BASE OF U.S. COALS WITH POTENTIAL FOR USE IN THE MANUFACTURE OF METALLURGICAL COKE

by

William S. Sanner¹ and David C. Benson²

ABSTRACT

A demonstrated reserve base (DRB) of bituminous coal suitable for coke-making has been estimated based on the latest published information on U.S. coal reserves. Bureau of Mines analyses of raw coalbed samples were used to classify the coals as low-, medium-, and high-volatile bituminous and grade them as premium, marginal, and latent coking coals. Coal rank was used as the basis for identifying coking coals, and ash and sulfur content were used to determine coking coal grade.

The demonstrated reserve base of coking coal for the entire United States is 162.67 billion tons. However, only 18.96 billion tons are premium (metallurgical) grade, and between 80 and 99 percent occurs in the Eastern States.

The demonstrated reserve base of marginal-grade coking coal is 31.3 billion tons; more than half the marginal reserve base is in the Eastern States, and most of the medium- and low-volatile marginal coals are in the Eastern States.

The Eastern and Midwestern States contain most of the latent-grade DRB of 112.4 billion tons; most (106.6 billion tons) is high-volatile coal, and 98 percent of the medium- and low-volatile latent coals occur in the Eastern States.

Based on the worst assumption, which assumes that only premium-grade coals are used for cokemaking, the DRB for high-volatile coal would suffice for 127 years, the medium-volatile coal for 80 years, and the low-volatile coal for 83 years.

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INTRODUCTION

Coal resources in the United States are vast, with deposits occurring in 10 Eastern, 7 Midwestern, and 10 Western States. The U.S. Geological Survey has identified a resource of 1,731 billion tons at depths to 3,000 feet (2).³ Identified resources are the sum of measured, indicated, and inferred coal deposits and include beds 14 inches or more thick to an overburden depth of 3,000 feet (2). These identified resources include anthracite, bituminous coal, subbituminous coal, and lignite and are not all extractable. The Federal Bureau of Mines has evaluated the measured and indicated resources and estimated the quantity of inplace coals in relatively thick beds near enough to the surface to be mined by conventional surface or underground methods. This estimate is the demonstrated reserve base (DRB).

Criteria for the coal DRB have been defined jointly by the Bureau of Mines and the U.S. Geological Survey (5, 9, 12) and include beds 28 inches or more thick for bituminous coal and anthracite, and 60 inches or more thick for subbituminous coal and lignite. Maximum depth for all except lignite is 1,000 feet; only lignite beds that can be surface (strip) mined to approximately 120-foot depths are included.

Table 1 lists the U.S. DRB for coals of all ranks. The Eastern United States (east of the Mississippi River) has a DRB of 202.9 billion tons; 96 percent is bituminous coal, 3.5 percent is anthracite, and 0.5 percent is lignite. In the Western States (west of the Mississippi River), the DRB is 235.4 billion tons, but only 14.6 percent of the coal is bituminous; 71.5 percent is subbituminous, 13.8 percent is lignite, and less than 0.5 percent is anthracite (10).

TABLE 1. - Demonstrated reserve base (DRB) of U.S. coals, January 1, 1976 (10)

Type of coal	Million tons	Percent	
		Regional	Total United States
EASTERN UNITED STATES DRB			
Bituminous.....	194,595.9	95.9	44.4
Lignite.....	1,083.0	.5	.2
Anthracite.....	7,246.9	3.6	1.7
Total.....	202,925.8	100.0	46.3
WESTERN UNITED STATES DRB			
Bituminous.....	34,328.7	14.6	7.8
Subbituminous.....	168,425.0	71.5	38.4
Lignite.....	32,533.6	13.8	7.4
Anthracite.....	124.2	.1	.1
Total.....	235,411.5	100.0	53.7
COMBINED UNITED STATES DRB			
Bituminous.....	228,924.6	NAp	52.2
Subbituminous.....	168,425.0	NAp	38.4
Lignite.....	33,616.6	NAp	7.7
Anthracite.....	7,371.1	NAp	1.7
Grand total.....	438,337.3	NAp	100.0

NAP Not applicable.

³Underlined numbers in parentheses refer to items in the list of references preceding the appendixes.

This report deals with the more than half of the U.S. DRB that is bituminous coal. Only such coals have agglomerating properties and are considered "coking coals" because when heated in the absence of air at high temperatures, they soften, swell, or contract followed by solidification into a cellular mass called coke. Coke has been and still is the priority fuel used in blast furnaces to smelt iron ore.

Not all coking coals are suitable for use in the metallurgical industries, because in addition to being strong (physically) the coke produced must be low in ash and sulfur content. Because only a small portion of the bituminous coal DRB is suitable for ironmaking, this report was prepared to delineate the quantity and quality of the bituminous DRB that can be used in the metallurgical industries now or that may have potential use as metallurgical fuel.

The estimates arrived at are based on the latest published information on U.S. coal reserves and computer analysis of thousands of coal samples analyzed by the Bureau of Mines over more than 50 years.

COKING COALS

Coal in the United States is classified by rank according to standards established by the American Society for Testing and Materials (ASTM) (1). All coals are ranked in four major groups--anthracite, bituminous, subbituminous, and lignite. Anthracite and bituminous, the higher ranked coals, are classified according to the amount of fixed carbon, dry mineral-matter-free basis, and some bituminous coals are classified according to calorific value. Subbituminous coal and lignite are classified according to calorific value. Bituminous coals are classified further as low-, medium-, and high-volatile. Details of the ASTM parameters used in classifying coal are shown in table 2.

Only the bituminous coals have agglomerating properties and are considered "coking coals" because when heated at high temperature (750° to 900° C) in the absence of air, they will soften, become plastic, expand or contract, and solidify into a coherent, cellular mass called coke which is mainly fixed carbon. It is recognized that some coals in the bituminous grouping will not coke, but those can be readily identified by standard analytical tests such as the free-swelling index and the agglomerating index (11).

The mechanism by which certain coals soften, swell, and solidify into coke has been studied by many investigators. Lowry (6) cites more than 200 studies and concludes that both the mechanism and coal properties that cause coal to coke or "cake" are still imperfectly known. However, only bituminous coals have such properties, and some have coking properties to a greater degree than others. The Bureau of Mines has studied the coking characteristics of many U.S. bituminous coals (8, 13-14), and although the expanding properties of bituminous coals cannot be predicted with any accuracy from chemical analysis, there is a rough relationship between expansion during carbonization and coal rank. In general, when carbonized, high-volatile coals contract and low-volatile coals expand (3).

TABLE 2. - Classification of coals by rank¹

Group	Fixed carbon limits percent (dry, mineral- matter-free basis)		Volatile matter limits, percent (dry, mineral- matter-free basis)		Calorific value limits, Btu per pound (moist, mineral-matter-free basis) ²		Agglomerating character
	Equal to or greater than--	Less than--	Greater than--	Equal to or less than--	Equal to or greater than--	Less than--	
ANTHRACITE							
Metaanthracite.....	98	NAP	NAP	2	NAP	NAP	Nonagglomerating
Anthracite.....	92	98	2	8	NAP	NAP	Do.
Semianthracite ³	86	92	8	14	NAP	NAP	Do.
BITUMINOUS							
Low-volatile bituminous...	78	86	14	22	NAP	NAP	Commonly agglomerating. ⁴
Medium-volatile bituminous	69	78	22	31	NAP	NAP	Do.
High-volatile A bituminous	NAP	69	31	NAP	⁵ 14,000	NAP	Do.
High-volatile B bituminous	NAP	NAP	NAP	NAP	⁵ 13,000	14,000	Do.
High-volatile C bituminous	NAP	NAP	NAP	NAP	{ 11,500	13,000	Do.
					10,500	11,500	Agglomerating.
SUBBITUMINOUS							
Subbituminous A.....	NAP	NAP	NAP	NAP	10,500	11,500	Nonagglomerating
Subbituminous B.....	NAP	NAP	NAP	NAP	9,500	10,500	Do.
Subbituminous C.....	NAP	NAP	NAP	NAP	8,300	9,500	Do.
LIGNITE							
Lignite A.....	NAP	NAP	NAP	NAP	6,300	8,300	Nonagglomerating
Lignite B.....	NAP	NAP	NAP	NAP	NAP	6,300	Do.

¹This classification does not include a few coals, principally nonbanded varieties, that have unusual physical and chemical properties and that come within the limits of fixed carbon or calorific value of the high-volatile bituminous and subbituminous ranks. All of these coals either contain less than 48 percent, dry, mineral-matter-free fixed carbon or have more than 15,500 moist, mineral-matter-free British thermal units per pound.

²Moist refers to coal containing its natural inherent moisture but not including visible water on the surface of the coal.

³If agglomerating, semianthracite is classified in low-volatile group of the bituminous class.

⁴It is recognized that there may be nonagglomerating varieties in these groups of the bituminous class, and there are notable exceptions in the high-volatile C bituminous group.

⁵Coals having 69 percent or more fixed carbon on the dry, mineral-matter-free basis are classified according to fixed carbon, regardless of calorific value.

Source: ASTM Annual Book of Standards, 1976 (1).

In ironmaking coke serves two basic purposes: (1) To supply the carbon to produce heat and reducing gases that smelt and reduce the ore to iron and (2), to support the heavy burden of ore, limestone, and other fluxing materials as it moves down the furnace shaft. The coke, therefore, in addition to being low in ash and sulfur content, must be physically strong to resist abrasion, impact, and degradation as it moves to the melting zone of the blast furnace.

Coals for metallurgical coke must be low in ash and sulfur, since in the cokemaking process (carbonization), all of the ash and much of the sulfur are retained by the coke. Coke produced by and for the iron and steel industry generally contains less than 8.0 percent ash and less than 1.0 percent sulfur. Both ash and sulfur must be removed in the ironmaking process, and excesses of either add to costs because additional flux must be added to furnace burdens. That increases the volume of slag (waste), decreases iron production, and with respect to sulfur, decreases iron quality.

In modern byproduct-recovery coke ovens, coal is charged to a battery of as many as 100 slot-type ovens 20 feet high by 50 feet long by 18 inches wide (7). The ovens are charged with approximately 33 tons of coal, which becomes coke after it remains in the oven operating at temperatures brought to 1,800° to 2,000° F over an 18-hour period. The hot coke is mechanically pushed from the oven, quenched (cooled), and moved to blast furnaces or to storage. The entire battery of ovens is charged and discharged at regular intervals so that a continuous supply of finished coke is produced.

There is no specification or standard for coking coals because the coal used in byproduct coke ovens is usually a blend of two or more bituminous coals. High-volatile bituminous coals contract when carbonized and produce the weakest (physical strength) cokes. When high-volatile coals are blended with relatively small amounts of low-volatile bituminous coals, which expand when carbonized, a strong, uniform coke suitable for blast furnace use is produced. Years of testing and experimentation have shown blending combinations to be almost unlimited. Many coals considered to be inferior for cokemaking are now blended in small amounts with prime coking coals without deleterious effects on the coke physical strength.

SELECTION CRITERIA FOR COKING COAL DEMONSTRATED RESERVE BASE

The base unit used to assess the coking coal reserve base was a computer tape produced by the Bureau of Mines fuels data bank, which contains proximate and ultimate analyses for 260,000 coal samples analyzed over a period of approximately 60 years. A computer program was prepared that averaged the analyses for each State, by county and bed. After averaging, the program ranked the coals according to ASTM specifications, first as anthracite, bituminous, subbituminous, and lignite, and second as low-, medium-, and high-volatile bituminous. The bituminous coals were split into premium, marginal, and latent grades based on ash and sulfur content of the raw coals. Premium-grade coking coal contains 8.0 percent or less ash and 1.0 percent or less sulfur, marginal-grade coking coal contains 8.1 to 12.0 percent ash and 1.1 to 1.8 percent sulfur, and latent-grade coking coal contains 12.1 to 16.0 percent ash and 1.9 and higher percent sulfur. Those limits were selected following discussions with major coke producers.

High-volatile C coals were included in the assessment, although many such coals have only moderate coking properties and are generally considered unsuitable for coke production.

The average analyses of the coals for each State are shown by county and coalbed in appendix A. Analyses are shown for both raw and washed coal in many instances.

ASH AND SULFUR REDUCTION POTENTIAL

Because only raw coal samples from those beds with analyses were considered, the DRB is at best conservative; a study of the data in appendix A will show that washing can change some latent-grade coals to marginal-grade and some marginal-grade coals to premium-grade.

All coals contain ash and sulfur, but the amount of each varies, not only among individual coals but even in coal from the same bed. These impurities can occur as separate mineral compounds or as chemical combinations. Minerals can include those in clays, shales, slate, and iron pyrites. The ash contains oxides of silica, alumina, calcium, and magnesium. Generally, the impurities are heavier than coal and can be removed by coal-cleaning devices on the basis of their difference in density. Ash can be reduced substantially by using a variety of coal-washing devices, but not all coals are cleanable, and of those that are, some respond to cleaning less readily than others.

Sulfur in coal occurs in two primary forms--iron pyrite and organic sulfur. As total sulfur increases, the pyritic form increases and tends to predominate. Organic sulfur is combined with other compounds as part of coal's molecular structure and is not removed by coal preparation. Only a part of the pyrite can be removed by present-day coal washing methods, and the amount that can be removed depends on particle size as well as physical and economic limitations of the cleaning devices. Pyrite can be partially removed by grinding followed by specific gravity separations in jigs, concentrating tables, and dense-media washers.

Washability studies by the Bureau of Mines on 455 coalbed samples throughout the United States (4) have shown that crushing the coal to pass 1-1/2 inches followed by specific gravity separation reduces ash content and has a marked effect on the removal of pyritic sulfur.

The Bureau of Mines studies of Pennsylvania coals, for example, showed that the ash content of the Pittsburgh coalbed in Greene County is reduced substantially when the coal is washed at 1.60 specific gravity after crushing to 1-1/2 inch and smaller in size. The pyritic sulfur content can be reduced from 2.3 percent in the raw coal to 1.0 percent in the washed coal. The organic sulfur is not removed by cleaning, and the total sulfur remains at 2.2 percent compared with 3.4 percent in the raw coal.

The Upper Freeport bed, relatively high in ash content (17.4 percent) in most Pennsylvania counties where it occurs, can be reduced to 7.6 percent when washed at 1.60 specific gravity after crushing to 1-1/2 inch and smaller.

in size. Total sulfur in the bed can be reduced as much as 72 percent because it occurs principally as pyrite. Coal from this bed is an excellent example of a high-sulfur coal that can be upgraded by grinding and proper preparation techniques.

In Wise County, Va., a source of premium-grade low-volatile coals, the Imboden coalbed (4) contains 1.2 percent sulfur, making it marginal grade. Washing at 1.60 specific gravity recovers 86 percent of the coal with a total sulfur content of 0.90 percent and upgrades the coal to premium coking quality.

In Preston County, W. Va., coal from the Upper Freeport bed is 21 percent ash and 2.7 percent sulfur (4). Crushing the coal to 1-1/2 inches and smaller followed by washing at 1.90 specific gravity will recover 85 percent of the coal at 10.7 percent ash and 1.80 percent sulfur, upgrading the coal to marginal quality. The Middle Kittanning coalbed, Barbour County, W. Va., contains 16.6 percent ash and 2.1 percent sulfur and is latent grade. Crushing to 3/8 inch and smaller followed by specific gravity separations at 1.60 will produce marginal-grade coal--85 percent recovery at 8.6 percent ash and 0.97 percent sulfur.

The No. 6 coalbed, Douglas County, Ill., latent grade in the raw state, can generally be upgraded to marginal quality (from 2.73 to 1.75 percent sulfur by washing (4) at 1.60 specific gravity.

The coalbeds cited are just a few examples of the possibility of upgrading many bituminous coals by selective coal preparation practices. As coal washing technology is advanced, it will be possible to use increasing amounts of the demonstrated reserve base of higher sulfur and ash content coals for coke manufacture.

DEMONSTRATED RESERVE BASE OF COKING COALS

The DRB for coking coal in the United States is summarized by States in tables 3, 4, and 5. The data are for the Eastern (Appalachian), Midwestern, and Western States. The coals are ranked as high, medium, and low volatile and categorized as premium, marginal, and latent coals based on ash and sulfur content. Table 6 shows the total U.S. coking coal DRB by regions. Appendix B lists DRB by State, county, rank, and grade.

In the United States as a whole there is an estimated demonstrated reserve base aggregating 162.7 billion tons of coking coal of all ranks and grades, but only 18.9 billion tons are categorized as premium (metallurgical) grade. Of the 18.9 billion tons, only 4.6 billion are medium- and low-volatile coals which are most necessary for selective blending with high-volatile coal to produce strong metallurgical coke. Premium-grade coking coals are concentrated in the Eastern States, with 84.7 percent occurring in six States. West Virginia and Kentucky contain 67.4 percent of all U.S. high-volatile premium-grade coking coal. West Virginia contains 78 percent (1.37 billion tons) of all medium-volatile premium-grade U.S. coking coals, and 99 percent of all low-volatile premium-grade U.S. coking coals.

TABLE 3. - Coking coal demonstrated reserve base, Eastern (Appalachian) Region

(Million tons)

State and volatile matter ¹	Premium	Marginal	Latent	Total
Alabama:				
High.....	236.81	462.24	853.39	1,552.44
Medium.....	1.00	473.86	71.82	546.68
Low.....	-	-	-	-
Total.....	237.81	936.10	925.21	2,099.12
Kentucky, East:				
High.....	4,363.19	3,047.68	589.24	8,000.11
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	4,363.19	3,047.68	589.24	8,000.11
Kentucky, West:				
High.....	-	-	7,459.79	7,459.79
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	-	-	7,459.79	7,459.79
Maryland:				
High.....	-	-	-	-
Medium.....	-	-	-	-
Low.....	.49	359.74	557.93	918.16
Total.....	.49	359.74	557.93	918.16
Ohio:				
High.....	-	1,009.89	16,742.89	17,752.78
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	-	1,009.89	16,742.89	17,752.78
Pennsylvania:				
High.....	436.74	1,123.94	13,416.67	14,977.35
Medium.....	-	1,208.14	2,943.44	4,151.58
Low.....	-	781.48	1,315.77	2,097.25
Total.....	436.74	3,113.56	17,675.88	21,226.18
Tennessee:				
High.....	165.22	274.33	406.70	846.25
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	165.22	274.33	406.70	846.25
Virginia:				
High.....	980.25	594.37	416.22	1,990.84
Medium.....	375.36	434.22	47.30	856.88
Low.....	-	-	-	-
Total.....	1,355.61	1,028.59	463.52	2,847.72
West Virginia:				
High.....	5,326.67	6,643.91	9,961.67	21,932.25
Medium.....	1,365.61	318.98	335.18	2,019.77
Low.....	2,813.63	488.14	409.30	3,711.07
Total.....	9,505.91	7,451.03	10,706.15	27,663.09
Appalachian Region:				
High.....	11,508.88	13,156.36	49,846.57	74,511.81
Medium.....	1,741.97	2,435.20	3,397.74	7,574.91
Low.....	2,814.12	1,629.36	2,283.00	6,726.48
Grand total.....	16,064.97	17,220.92	55,527.31	88,813.20

¹DMMf basis; high volatile--greater than 31 percent volatile matter; medium volatile--greater than 22 percent, equal to or less than 31 percent; low volatile--greater than 14 percent, equal to or less than 22 percent.

NOTE.--Dashes indicate that there is no coking coal DRB in that category.

TABLE 4. - Coking coal demonstrated reserve base, Midwestern Region

(Million tons)

State and volatile matter ¹	Premium	Marginal	Latent	Total
Arkansas:				
High.....	-	-	-	-
Medium.....	-	-	-	-
Low.....	24.50	382.00	23.20	429.70
Total.....	24.50	382.00	23.20	429.70
Illinois:				
High.....	-	4,070.54	41,899.51	45,968.05
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	-	4,070.54	41,899.51	45,968.05
Indiana:				
High.....	-	1,842.44	5,744.10	7,586.54
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	-	1,842.44	5,744.10	7,586.54
Iowa:				
High.....	-	-	1,736.83	1,736.83
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	-	-	1,736.83	1,736.83
Kansas:				
High.....	-	-	529.39	529.39
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	-	-	529.39	529.39
Michigan:				
High.....	-	82.61	28.56	111.17
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	-	82.61	28.56	111.17
Missouri:				
High.....	-	-	3,656.70	3,656.70
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	-	-	3,656.70	3,656.70
Oklahoma:				
High.....	46.26	122.40	457.72	626.38
Medium.....	13.81	41.54	91.22	146.57
Low.....	-	61.26	-	61.26
Total.....	60.07	225.20	548.94	834.21
Midwest Region:				
High.....	46.26	6,117.99	54,052.81	60,217.06
Medium.....	13.81	41.54	91.22	146.57
Low.....	24.50	443.26	23.20	490.96
Grand total.....	84.57	6,602.79	54,167.23	60,854.59

¹ DMMF basis; high volatile--greater than 31 percent volatile matter; medium volatile--greater than 22 percent, equal to or less than 31 percent; low volatile--greater than 14 percent, equal to or less than 22 percent.

NOTE.--Dashes indicate that there is no coking coal DRB in that category.

TABLE 5. - Coking coal demonstrated reserve base, Western Region

(Million tons)

State and volatile matter ¹	Premium	Marginal	Latent	Total
Colorado:				
High.....	2,025.99	1,669.54	610.65	4,306.18
Medium.....	-	4.51	-	4.51
Low.....	-	-	-	-
Total.....	2,025.99	1,674.05	610.65	4,310.69
Montana:				
High.....	-	-	1,254.03	1,254.03
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	-	-	1,254.03	1,254.03
New Mexico:				
High.....	-	1,761.20	6.90	1,768.10
Medium.....	-	-	-	-
Low.....	-	9.10	-	9.10
Total.....	-	1,770.30	6.90	1,777.20
Utah:				
High.....	782.24	29.67	210.00	1,021.91
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	782.24	29.67	210.00	1,021.91
Washington:				
High.....	7.90	1.64	123.13	132.67
Medium.....	-	1.64	3.34	4.98
Low.....	-	-	-	-
Total.....	7.90	3.28	126.47	137.65
Wyoming:				
High.....	-	4,006.16	494.70	4,500.86
Medium.....	-	-	-	-
Low.....	-	-	-	-
Total.....	-	4,006.16	494.70	4,500.86
Western Region:				
High.....	2,816.13	7,468.21	2,699.41	12,983.75
Medium.....	-	6.15	3.34	9.49
Low.....	-	9.10	-	9.10
Grand total.....	2,816.13	7,483.46	2,702.75	13,002.34

¹DMMF basis; high volatile--greater than 31 percent volatile matter; medium volatile--greater than 22 percent, equal to or less than 31 percent; low volatile--greater than 14 percent, equal to or less than 22 percent.

NOTE.--Dashes indicate that there is no coking coal DRB in that category.

TABLE 6. - Coking coal demonstrated reserve base, by region

Region and volatile matter ¹	Premium			Marginal		
	Million tons	Percent of--		Million tons	Percent of--	
		Regional total	U.S. total		Regional total	U.S. total
Eastern:						
High.....	11,508.88	71.64	NAp	13,156.36	76.40	NAp
Medium.....	1,741.97	10.84	NAp	2,435.20	14.14	NAp
Low.....	2,814.12	17.52	NAp	1,629.36	9.46	NAp
Total.....	16,064.97	100.00	84.70	17,220.92	100.00	55.01
Midwestern:						
High.....	46.26	54.70	NAp	6,117.99	92.66	NAp
Medium.....	13.81	16.33	NAp	41.54	.63	NAp
Low.....	24.50	28.97	NAp	443.26	6.71	NAp
Total.....	84.57	100.00	.45	6,602.79	100.00	21.09
Western:						
High.....	2,816.13	100.00	NAp	468.21	99.80	NAp
Medium.....	-	-	-	6.15	.08	NAp
Low.....	-	-	-	9.10	.12	NAp
Total.....	2,816.13	100.00	14.85	7,483.46	100.00	23.90
United States:						
High.....	14,371.27	NAp	75.77	26,742.56	NAp	85.42
Medium.....	1,755.78	NAp	9.26	2,482.89	NAp	7.93
Low.....	2,838.62	NAp	14.97	2,081.72	NAp	6.65
Grand total.....	18,965.67	NAp	100.00	31,307.17	NAp	100.00
	Latent			United States		
	Million tons	Percent of--		Million tons	Percent of U.S. total	
		Regional total	U.S. total			
Eastern:						
High.....	49,846.57	89.77	NAp	74,511.81	45.80	
Medium.....	3,397.74	6.12	NAp	7,574.91	4.66	
Low.....	2,283.00	4.11	NAp	6,726.48	4.14	
Total.....	55,523.31	100.00	49.40	88,813.20	54.60	
Midwestern:						
High.....	54,052.81	99.79	NAp	60,217.06	37.01	
Medium.....	91.22	.17	NAp	146.57	.09	
Low.....	23.20	.04	NAp	490.96	.30	
Total.....	54,167.23	100.00	48.19	60,854.59	37.40	
Western:						
High.....	2,699.41	99.88	NAp	12,983.35	7.98	
Medium.....	3.34	.12	NAp	9.49	.01	
Low.....	-	-	-	9.10	.01	
Total.....	2,702.75	100.00	2.40	13,002.34	8.00	
United States:						
High.....	106,598.79	NAp	94.84	147,712.62	90.81	
Medium.....	3,492.30	NAp	3.11	7,730.97	4.75	
Low.....	2,306.20	NAp	2.05	7,226.54	4.44	
Grand total.....	112,397.29	NAp	100.00	162,670.13	100.00	

NAp Not applicable.

¹ DMMF basis; high volatile--greater than 31 percent volatile matter; medium volatile--greater than 22 percent, equal to or less than 31 percent; low volatile--greater than 14 percent, equal to or less than 22 percent.

NOTE.--Dashes indicate that there is no coking coal DRB in that category.

The marginal-grade U.S. coking coal DRB is estimated at 31.3 billion tons; 55.0 percent is in the Eastern States, 21.1 in the Midwestern States, and 23.9 percent in the Western States. As with the premium-grade DRB, most of the marginal coal is high volatile--26.7 billion tons, compared with only 4.5 billion tons of medium- and low-volatile coal. Eighty-nine percent of the medium- and low-volatile marginal coal occurs in the Eastern States, most of it in Pennsylvania, West Virginia, Maryland, and Alabama.

The demonstrated U.S. reserve base of latent-grade coking coal is estimated to be 112.4 billion tons, of which 106.6 billion tons are high-volatile and 5.8 billion tons are medium- and low-volatile coals; and 98 percent of the medium- and low-volatile latent coals occur in the Eastern States.

ESTIMATED LIFE OF COKING COAL RESERVE BASE

The Bureau of Mines collected data on the origin of high-, medium-, and low-volatile coal shipped to coke plants in the United States. Data for 1971-75 inclusive are summarized in table 7 for the Eastern, Midwestern, and Western States.

The data indicate a fairly stable input of coal to coke ovens in the 5-year period. Of the total coal received by coke plants in the United States in 1975, 56.4 million tons (66.9 percent) was high-volatile bituminous coal, 10.9 million tons (12.9 percent) was medium-volatile coal, and 17.1 million tons (20.2 percent) was low-volatile coal. Based on 1971-75 consumption and assuming 50-percent recovery, the worst case--one in which only premium coals went to coke plants--would be that the premium high-volatile DRB would be exhausted in 127 years, the medium-volatile DRB in 80 years, and the low-volatile DRB in 83 years.

If we assume that improved and new coal washing techniques will move 20 percent of the marginal high-volatile coal DRB (26,742.56 million tons) into premium grade, then the life of the premium high-volatile DRB would be extended to 174 years. Similarly, if 20 percent of the marginal medium-volatile DRB (2,482.89 million tons) can be upgraded, the DRB would last 103 years. Under similar conditions the marginal low-volatile DRB would last 95 years.

The above assessment does not include any latent-grade coking coal, of which there is a 112.4-billion-ton DRB in the United States. Improved and new coal-washing techniques will no doubt move sizable portions into marginal categories. Medium- and low-volatile marginal-grade coking coals can be mixed with premium-grade high-volatile coals to make acceptable cokes.

It appears, then, that the supply of coals suitable for coke manufacture is adequate for at least 80 years hence. However, should substantial quantities of premium-grade high-volatile coking coals be diverted to electric power generation, then the life of the reserves could be substantially reduced.

TABLE 7. - Origin of bituminous coal received by U.S. coke plants, by region
(Million tons)

Volatile matter ¹	Region			U.S. total
	Eastern	Midwestern	Western	
1971				
High.....	45.91	4.00	3.89	53.80
Medium.....	11.67	.21	.73	12.61
Low.....	11.93	.14	-	12.07
Total.....	69.51	4.35	4.62	78.48
Total coal produced in region.....	421.40	87.33	13.75	522.48
Percent coking coal.....	17	5	34	15
1972				
High.....	50.28	3.86	3.86	58.00
Medium.....	13.60	.22	.65	14.47
Low.....	14.93	.18	-	15.11
Total.....	78.81	4.26	4.51	87.58
Total coal produced in region.....	439.58	99.93	17.52	557.03
Percent coking coal.....	18	4	26	16
1973				
High.....	52.73	4.09	4.20	61.02
Medium.....	10.17	.27	1.00	11.44
Low.....	17.39	.22	.01	17.62
Total.....	80.29	4.58	5.21	90.08
Total coal produced in region.....	428.48	94.70	22.24	545.42
Percent coking coal.....	19	5	23	17
1974				
High.....	51.86	4.20	4.34	60.40
Medium.....	9.57	.18	.40	10.15
Low.....	16.42	.18	.49	17.09
Total.....	77.85	4.56	5.23	87.64
Total coal produced in region.....	429.56	89.97	25.87	545.40
Percent coking coal.....	18	5	20	16
1975				
High.....	48.31	3.96	4.16	56.43
Medium.....	10.26	.24	.41	10.91
Low.....	16.23	.28	.54	17.05
Total.....	74.80	4.48	5.11	84.39
Total coal produced in region.....	452.77	94.28	30.02	577.07
Percent coking coal.....	17	5	17	15

¹DMMF basis; high volatile--greater than 31 percent volatile matter; medium volatile--greater than 22 percent, equal to or less than 31 percent; low volatile--greater than 14 percent, equal to or less than 22 percent.

CONCLUSIONS

The demonstrated reserve base of coking coal for the entire United States is 162.67 billion tons. Fifty-five percent is in the Eastern States, 37 percent is in the Midwestern States, and 8 percent is in the Western States. However, when premium-grade (metallurgical) coking coals are considered, the U.S. DRB is only 18.96 billion tons, of which 14.37 billion tons are high-volatile coal, 1.75 billion tons are medium-volatile coal, and 2.84 billion tons are low-volatile coal. Most of the premium-grade coking coals are in the Eastern States, which contain 80.0 percent of all high-volatile, 99.2 percent of all medium-volatile, and 99.0 percent of the low-volatile premium-grade coking coals.

The U.S. demonstrated reserve base of marginal-grade coking coal is 31.3 billion tons; 26.7 billion tons are high-volatile, 2.5 billion tons are medium-volatile, and 2.1 billion tons are low-volatile coking coal. More than half the marginal reserve base is in the Eastern States, and 76.4 percent of it is high-volatile coal. Ninety-eight percent of the medium-volatile and 78.3 percent of the low-volatile marginal coals are in the Eastern States.

The Eastern and Midwestern States contain most of the latent-grade DRB of 112.4 billion tons, but as in other grades, most (106.6 billion tons) is high-volatile coal. About 98 percent of the medium- and low-volatile latent coals occur in the Eastern States.

For the long term, it is probable that improved and new coal washing techniques will extend the coking coal DRB considerably, shifting many latent and marginal coals into marginal and premium grades.

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APPENDIX A.--U.S. COALBEDS--ANALYSES, RANK, AND GRADE

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSJ	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FICD	DRY CARR	DRY ASH	DRY SUL	DRY BTU	DRY HVD	DRY CAR	DRY NIT	DRY OXY	DMF FC	MMF BTU	AST										
COUNTY: 7 BIBB																				(1)	(2)	(3)			
202	RAW	4.4	31.9	44.7	19.5	1.5	11815.	4.5	66.9	1.3	6.4	61.9	13923.	2290.	0.0	0.	HVB BIT	LATENT							
220	RAW	3.2	35.7	57.8	6.5	0.7	13998.	5.1	78.5	1.2	7.7	62.3	14441.	2194.	0.0	0.	HVA BIT	PREMIUM							
223	RAW	5.2	32.9	53.1	14.0	1.2	13050.	4.6	72.5	1.3	6.4	62.9	14286.	2230.	0.0	0.	HVA BIT	LATENT							
225	RAW	2.1	37.2	57.2	5.9	0.8	14379.	5.1	79.9	1.4	6.5	61.0	14846.	2253.	0.0	0.	HVA BIT	PREMIUM							
225	WASH	2.8	36.3	57.0	6.7	0.9	14214.	5.3	81.7	1.4	6.7	61.6	14742.	2291.	6.4	51.	HVA BIT	PREMIUM							
239	RAW	3.5	33.6	59.8	6.6	1.2	14400.	5.1	79.3	1.4	5.2	64.7	14762.	2130.	0.0	0.	HVA BIT	MARGINAL							
296	RAW	3.4	30.0	52.8	17.2	2.3	12540.	0.0	0.0	0.0	0.0	65.4	14413.	2700.	8.0	76.	HVA BIT	LATENT							
304	RAW	2.6	34.9	55.3	9.8	0.6	13498.	0.0	0.0	0.0	0.0	61.9	14580.	2310.	0.0	0.	HVA BIT	MARGINAL							
364	WASH	4.2	30.8	55.4	7.8	0.5	13779.	0.0	0.0	0.0	0.0	60.6	14293.	2210.	0.0	0.	HVA BIT	PREMIUM							
485	RAW	2.9	33.6	57.3	8.6	1.1	13938.	0.0	0.0	0.0	0.0	64.0	14720.	2320.	0.0	0.	HVA BIT	MARGINAL							
485	WASH	3.3	34.6	57.8	7.6	1.1	14127.	0.0	0.0	0.0	0.0	63.2	14697.	0.	0.0	0.	HVA BIT	MARGINAL							
486	WASH	5.0	36.8	57.7	5.5	0.9	14160.	0.0	0.0	0.0	0.0	61.5	14141.	2300.	6.0	0.	HVA BIT	PREMIUM							
COUNTY: 9 BLOUNT																									
236	RAW	5.5	32.3	59.9	7.8	1.6	14073.	0.0	0.0	0.0	0.0	65.8	14229.	2593.	7.0	75.	HVA BIT	MARGINAL							
281	RAW	2.3	30.5	54.7	14.8	1.2	12920.	4.7	72.2	1.7	5.4	65.4	14776.	2680.	7.0	55.	HVA BIT	LATENT							
299	RAW	3.5	32.8	62.4	4.8	0.9	14486.	5.1	83.6	1.8	5.1	66.1	14601.	2392.	8.6	60.	HVA BIT	PREMIUM							
338	RAW	2.7	30.7	54.8	14.5	1.3	12950.	4.9	69.0	1.7	7.8	65.3	14669.	2645.	5.5	54.	HVA BIT	LATENT							
364	RAW	3.6	33.0	62.6	4.4	1.8	14670.	0.0	0.0	0.0	0.0	66.1	14584.	2220.	0.0	0.	HVA BIT	MARGINAL							
COUNTY: 43 CULLMAN																									
299	RAW	4.0	36.8	59.6	3.6	0.8	14487.	5.4	83.5	1.8	7.1	62.1	14342.	2509.	4.9	47.	HVA BIT	PREMIUM							
COUNTY: 55 ETOWAH																									
236	RAW	2.9	31.9	61.0	7.1	1.9	14300.	0.0	0.0	0.0	0.0	66.5	14741.	2080.	8.5	0.	HVA BIT	LATENT							
COUNTY: 57 FAYETTE																									
281	RAW	3.1	35.2	54.4	10.4	0.7	13204.	0.0	0.0	0.0	0.0	61.5	14263.	0.	0.0	0.	HVA BIT	MARGINAL							
299	RAW	5.5	35.9	52.5	11.6	1.6	12950.	0.0	0.0	0.0	0.0	60.3	13659.	2360.	0.0	0.	HVB BIT	MARGINAL							

¹FSI--free swelling index; where 0.0 is shown, no data were available.

²HGI--Hardgrove grindability index.

³See table 2 for specifications for high-volatile A, B, and C coals.

AVERAGE COALBED ANALYSES FOR STATE: I ALABAMA

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AST	AVER PSI	AVER HGI	RANK	GRADE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		MOI REC	DRY VOL	DRY TATT	DRY CARB	ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMHF BTU																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
COUNTY: 71 JACKSON		RAW	1.7	39.0	52.0	9.1	1.5	13895.	0.0	0.0	0.0	0.0	57.9	14896.	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.	0.0	0.

AVERAGE COALBED ANALYSES FOR STATE: 1 ALABAMA

BED	TYPE	*****PROXIMATE*****					*****ULTIMATE*****					*****ANALYSIS*****					GRADE
		MOI	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	
		REC	VOL	FIXD	ASH	SUL	BTU	HYD	CAR	NIT	OXY	FC	BTU	AST	FSI	HC1	
975	WASH	3.7	31.9	62.8	5.3	1.1	14600.	0.0	0.0	0.0	0.0	66.9	14733.	2540.	0.0	0.	MVA BIT MARGINAL
977	RAW	3.8	32.4	60.7	6.9	0.8	14314.	0.0	0.0	0.0	0.0	65.8	14720.	2600.	0.0	0.	MVA BIT PREMIUM
984	RAW	1.4	31.8	59.4	8.8	1.9	14117.	0.0	0.0	0.0	0.0	66.1	15092.	0.	0.0	0.	MVA BIT LATENT
COUNTY: 93 MARION																	
001	RAW	4.4	40.5	55.6	3.9	1.0	14200.	0.0	0.0	0.0	0.0	58.2	14018.	0.	0.0	0.	MVA BIT PREMIUM
001	WASH	5.0	39.9	57.0	3.2	1.0	14315.	0.0	0.0	0.0	0.0	59.2	13943.	2280.	0.0	0.	MVB BIT PREMIUM
298	RAW	4.6	42.4	54.4	3.2	1.3	14420.	0.0	0.0	0.0	0.0	56.6	14070.	2230.	0.0	0.	MVA BIT MARGINAL
298	WASH	4.6	40.6	56.2	3.2	1.4	14340.	0.0	0.0	0.0	0.0	58.5	13972.	2150.	3.5	39.	MVB BIT MARGINAL
299	RAW	4.7	39.8	55.6	4.6	1.1	14115.	5.3	79.8	1.8	8.3	58.7	13972.	2329.	2.2	41.	MVB BIT MARGINAL
299	WASH	6.3	39.1	57.3	3.6	1.1	14217.	5.3	79.8	1.9	9.1	59.8	13686.	2315.	2.6	40.	MVB BIT MARGINAL
COUNTY: 115 ST CLAIR																	
204	RAW	4.7	35.1	59.7	5.2	1.0	14280.	5.3	80.1	1.7	6.7	63.5	14249.	1920.	0.0	0.	MVA BIT PREMIUM
225	RAW	1.6	35.1	54.7	10.2	0.9	13650.	0.0	0.0	0.0	0.0	61.7	14933.	0.	0.0	0.	MVA BIT MARGINAL
225	WASH	3.4	33.8	52.8	13.4	0.8	13022.	0.0	0.0	0.0	0.0	61.9	14514.	2813.	6.5	56.	MVA BIT LATENT
242	RAW	2.4	34.1	61.5	4.4	1.1	15010.	5.1	83.9	1.5	4.0	64.8	15212.	0.	0.0	0.	MVA BIT MARGINAL
247	RAW	3.9	29.3	61.0	9.7	1.5	14050.	4.9	78.8	1.4	3.7	68.5	14803.	2380.	0.0	0.	MVA BIT MARGINAL
277	RAW	5.0	29.0	51.0	20.0	1.9	11660.	0.0	0.0	0.0	0.0	65.6	13653.	0.	0.0	0.	MVB BIT LATENT
296	RAW	2.2	34.1	56.8	9.1	2.4	13758.	4.9	75.9	1.7	5.6	63.5	14562.	2273.	0.0	0.	MVA BIT LATENT
296	WASH	7.1	33.3	58.8	8.0	1.7	13870.	0.0	0.0	0.0	0.0	64.7	13786.	2392.	7.0	62.	MVB BIT MARGINAL
336	RAW	3.8	32.5	57.0	10.5	1.9	13430.	0.0	0.0	0.0	0.0	64.7	14238.	2610.	7.5	53.	MVA BIT LATENT
COUNTY: 117 SHELBY																	
182	RAW	3.2	35.5	56.3	8.2	0.4	13705.	4.8	76.9	1.2	8.4	61.8	14465.	2350.	0.0	0.	MVA BIT MARGINAL
194	RAW	2.4	38.2	54.9	6.9	0.7	14002.	5.1	77.7	1.2	7.5	59.4	14635.	2244.	0.0	0.	MVA BIT PREMIUM
194	WASH	3.2	37.5	54.8	7.6	0.6	13879.	5.1	78.2	1.5	7.1	59.9	14515.	2287.	4.7	48.	MVA BIT PREMIUM
204	RAW	3.4	35.0	56.5	8.5	0.5	13811.	5.1	78.3	1.5	7.0	62.3	14575.	2599.	0.0	0.	MVA BIT MARGINAL
204	WASH	3.8	35.0	56.9	8.1	0.5	13825.	5.2	79.4	1.5	7.3	62.5	14467.	2555.	3.0	47.	MVA BIT MARGINAL
220	RAW	2.8	31.7	57.6	10.7	1.1	13407.	4.9	75.2	1.3	6.9	65.4	14518.	2210.	0.0	0.	MVA BIT MARGINAL
223	RAW	3.6	35.1	61.4	3.5	0.6	14764.	5.3	82.8	1.5	6.3	63.9	14684.	2176.	0.0	0.	MVA BIT PREMIUM
225	RAW	2.7	35.0	58.5	6.5	0.9	14291.	5.0	77.8	1.4	6.7	63.1	14796.	2190.	0.0	0.	MVA BIT PREMIUM

AVERAGE COALBED ANALYSES FOR STATE: 1 ALABAMA

BED	TYPE ANAL	*****PROXIMATE*****				*****ULTIMATE*****				*****				AST	AVER FSI	AVER MGI	RANK	GRADE
		MOI REC	DRY VOL MATT	DRY FIXD CARB	DRY ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU					
227	WASH	2.9	38.4	52.2	9.4	2.3	13507.	0.0	0.0	0.0	0.0	56.5	14231.	2416.	4.7	0.	HVA BIT	LATENT
228	RAW	3.0	31.0	57.4	11.6	2.1	13190.	4.9	74.0	1.6	5.8	66.1	14266.	2600.	0.0	0.	HVA BIT	LATENT
229	RAW	3.3	33.6	52.0	14.4	1.8	12703.	4.8	70.3	1.6	6.6	62.0	14200.	2731.	4.5	50.	HVA BIT	LATENT
229	WASH	3.2	34.6	54.0	11.3	1.5	13205.	5.0	75.3	1.8	6.8	61.9	14291.	2738.	5.7	50.	HVA BIT	MARGINAL
278	RAW	3.4	37.7	46.8	15.5	3.4	12430.	0.0	0.0	0.0	0.0	56.9	13830.	2070.	5.0	45.	HVB BIT	LATENT
279	RAW	3.4	32.5	53.2	14.3	0.8	12629.	4.7	72.2	1.7	7.1	63.1	14226.	2791.	2.6	50.	HVA BIT	LATENT
279	WASH	3.9	32.2	53.9	14.0	0.8	12771.	4.7	72.3	1.8	6.6	63.6	14240.	2616.	3.6	52.	HVA BIT	LATENT
281	RAW	4.5	34.8	56.0	9.2	0.9	13240.	4.9	72.7	1.7	8.6	62.4	13648.	2779.	2.5	49.	HVB BIT	MARGINAL
299	RAW	3.3	37.9	57.2	4.9	1.4	14205.	5.4	82.6	1.9	6.5	60.7	14289.	2344.	4.5	45.	HVA BIT	MARGINAL
299	WASH	4.2	38.0	57.7	4.3	1.3	14312.	5.5	82.8	1.9	7.2	60.8	14179.	2354.	5.1	44.	HVA BIT	MARGINAL
470	RAW	2.7	32.8	54.3	12.9	0.9	12930.	0.0	0.0	0.0	0.0	63.3	14425.	2885.	2.5	0.	HVA BIT	LATENT
470	WASH	4.1	33.0	54.0	13.0	1.1	12863.	0.0	0.0	0.0	0.0	63.1	14088.	2877.	4.1	50.	HVA BIT	LATENT
475	WASH	3.4	34.9	53.5	11.6	1.6	13148.	4.9	73.1	1.8	6.6	61.5	14220.	2784.	6.0	50.	HVA BIT	MARGINAL
COUNTY: 133 WINSTON																		
299	RAW	5.4	40.3	55.4	4.3	1.4	14096.	0.0	0.0	0.0	0.0	58.3	13773.	2213.	1.0	47.	HVB BIT	MARGINAL
299	WASH	7.3	39.3	56.9	3.8	1.3	14131.	5.2	78.6	2.0	8.5	59.6	13455.	2192.	2.7	41.	HVB BIT	MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 1 ALABAMA

*****PROXIMATE*****
MOI DRY DRY DRY DRY
REC VOL FICD ASH
TATT CARB*****ULTIMATE*****
DRY DRY DRY DRY DRY
HYD CAR NIT OXY FC

GRADE

RANK

AVER
HGIAVER
FSI

AST

MMMF
BTUDRY
FCDRY
OXYDRY
NITDRY
CARDRY
HYDDRY
BTUDRY
SULDRY
VOLDRY
ASHDRY
FICDDRY
CARBDRY
TATTDRY
RECDRY
VOLDRY
FICDDRY
CARBDRY
TATT

PREMIUM

HVA BIT

0.0

0.0

2165.

14778.

63.4

0.0

0.0

0.0

0.0

14332.

0.7

6.4

55.9

34.7

3.1

WASH

225

225

225

225

225

PREMIUM

HVA BIT

61.

8.0

2301.

14711.

61.3

0.0

1.5

81.9

5.3

14640.

0.8

3.9

58.6

37.5

3.0

RAW

239

239

239

239

239

PREMIUM

HVA BIT

49.

4.8

2245.

14585.

60.2

5.8

2.0

83.2

5.5

14673.

0.0

3.5

57.8

3.5

WASH

239

239

239

239

239

PREMIUM

HVA BIT

0.0

0.0

0.

14770.

64.0

8.7

1.4

80.7

5.2

14730.

0.7

3.3

61.6

3.3

RAW

240

240

240

240

240

PREMIUM

HVA BIT

0.0

0.0

0.

14889.

63.9

5.5

1.6

83.2

5.3

14900.

0.5

3.9

61.1

3.9

RAW

277

277

277

277

277

PREMIUM

HVA BIT

0.0

0.0

2370.

14902.

62.5

0.0

0.0

0.0

14533.

0.6

4.7

59.2

36.1

2.0

RAW

982

982

982

982

982

PREMIUM

HVA BIT

0.0

0.0

2195.

14785.

62.8

0.0

0.0

0.0

14421.

0.7

5.4

50.0

35.6

2.6

WASH

982

982

982

982

982

COUNTY: 125 TUSCALOOSA

MARGINAL

HVA BIT

0.0

7.5

2615.

14642.

65.3

0.0

0.0

0.0

13939.

1.3

8.5

59.0

32.5

3.2

RAW

001

001

001

001

001

MARGINAL

HVA BIT

0.0

8.0

2580.

14573.

64.8

0.0

0.0

0.0

14053.

1.3

8.1

58.9

33.1

3.8

WASH

001

001

001

001

001

LATENT

HVA BIT

64.

7.0

2856.

14580.

66.0

5.0

1.5

76.4

4.8

13320.

1.2

12.2

57.1

30.8

3.3

RAW

198

198

198

198

198

LATENT

HVA BIT

59.

6.0

2910.

14476.

62.4

5.6

1.6

69.6

4.7

13122.

1.3

12.8

53.6

33.6

3.2

WASH

198

198

198

198

198

MARGINAL

HVA BIT

66.

7.2

2342.

14700.

65.8

5.6

1.5

81.3

5.2

14171.

1.5

7.4

60.2

32.4

3.0

RAW

199

199

199

199

199

MARGINAL

HVA BIT

60.

7.7

2600.

14536.

64.9

4.4

1.7

75.0

4.7

14346.

1.3

6.5

60.0

33.5

4.1

WASH

199

199

199

199

199

MARGINAL

HVA BIT

59.

7.2

2477.

14626.

65.7

0.0

0.0

0.0

14323.

1.2

6.5

60.8

32.7

3.8

RAW

200

200

200

200

200

MARGINAL

HVA BIT

66.

8.5

2250.

14899.

65.2

0.0

0.0

0.0

14760.

1.3

4.5

61.8

33.7

2.7

RAW

201

201

201

201

201

MARGINAL

HVA BIT

0.0

0.0

2770.

AVERAGE COALBED ANALYSES FOR STATE: 2 ALASKA

BED	TYPE	*****APPROXIMATE*****				*****ULTIMATE*****				DMMF		AST	AVER FSI	AVER HGI	RANK	GRADE	
		NOI	DRY	DRY	DRY	DRY	DRY	DRY	DRY	FC	BTU						
ANAL	REC	VOL	FIXD	ASH	DRY	SUL	BTU	HYD	CAR	NIT	OXY						
COUNTY: 5 COOK INLET SUSITNA																	
001	RAW	9.2	38.9	43.9	16.0	0.3	11871.	0.0	0.0	0.0	0.0	53.2	12750.	2736.	1.1	0.	HVC BIT LATENT
001	WASH	8.8	40.2	44.4	15.4	0.3	12117.	0.0	0.0	0.0	0.0	53.4	13322.	2628.	1.7	52.	HVB BIT LATENT
COUNTY: 14 YUKON RIVER																	
001	RAW	23.2	47.5	41.8	11.0	0.2	11140.	0.0	0.0	0.0	0.0	47.4	9401.	2346.	0.0	37.	SUBBIT C

AVERAGE COALBED ANALYSES FOR STATE: 5 ARKANSAS

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AST	AVER FSI	AVER HGI	RANK	GRADE		
		MOI REC	DRY VOL	DRY WATT	FIXD CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMHF FC	MMHF BTU														
COUNTY: 47 FRANKLIN																												
554	RAW	2.6	17.8	74.7	7.5	2.0	14440.	0.0	0.0	0.0	0.0	82.0	14996.	2317.	9.0	109.	LV BIT	LATENT										
563	RAW	3.2	15.7	76.7	7.6	1.4	14367.	0.0	0.0	0.0	0.0	84.0	14905.	2304.	0.0	0.	LV BIT	MARGINAL										
799	RAW	2.9	19.8	73.7	6.5	3.4	14620.	0.0	0.0	0.0	0.0	80.3	14770.	0.	0.0	0.	LV BIT	LATENT										
COUNTY: 71 JOHNSON																												
554	RAW	3.4	15.2	79.5	5.3	0.7	14813.	4.4	88.6	2.0	1.4	84.6	15052.	2265.	8.5	105.	LV BIT	PREMIUM										
562	RAW	4.3	11.2	80.9	7.9	3.7	14200.	0.0	0.0	0.0	0.0	89.8	14302.	2230.	0.0	75.	SEMIANTH											
562	WASH	4.6	12.5	81.1	6.4	3.0	14520.	0.0	0.0	0.0	0.0	88.2	14434.	2190.	0.0	82.	SEMIANTH											
563	RAW	2.4	12.6	77.9	9.5	2.5	13943.	3.7	82.2	1.6	0.7	87.7	14758.	2331.	0.0	80.	SEMIANTH											
563	WASH	3.7	12.6	78.2	9.2	2.3	14023.	0.0	0.0	0.0	0.0	87.7	14614.	2217.	0.0	82.	SEMIANTH											
COUNTY: 83 LOGAN																												
551	RAW	1.7	18.1	70.2	11.7	2.1	13708.	4.2	82.5	1.5	1.9	81.1	15074.	2291.	8.5	0.	LV BIT	LATENT										
551	WASH	3.6	17.5	70.2	12.3	2.2	13607.	4.3	81.2	1.6	1.5	81.7	14728.	2125.	0.0	0.	LV BIT	LATENT										
563	RAW	3.6	12.3	80.4	7.4	1.2	14282.	0.0	0.0	0.0	0.0	87.7	14752.	2357.	0.0	0.	SEMIANTH											
COUNTY: 115 POPE																												
563	RAW	2.2	12.5	76.6	10.9	1.9	13712.	0.0	0.0	0.0	0.0	87.5	14877.	2246.	0.0	0.	SEMIANTH											
COUNTY: 127 SCOTT																												
563	RAW	2.0	20.0	70.6	9.4	1.1	14055.	0.0	0.0	0.0	0.0	79.0	15139.	2302.	0.0	0.	LV BIT	MARGINAL										
COUNTY: 131 SEBASTIAN																												
562	RAW	1.9	18.2	74.4	7.5	0.9	14396.	4.2	83.1	1.7	2.2	81.2	15211.	2308.	8.5	113.	LV BIT	PREMIUM										
563	RAW	2.7	17.2	72.6	10.1	1.5	13939.	4.4	85.6	1.8	1.8	82.1	14965.	2251.	9.0	111.	LV BIT	MARGINAL										

AVERAGE QUALITY ANALYSES FOR STATES OF COLORADO

*****PROXIMATE*****
 MOI DRY DRY DRY
 REC VOL FIXD ASH
 NATT CARB

*****ULTIMATE*****
 DRY DRY DRY DRY
 HYD CAR NIT OXY
 FC BTU

AST AVER AVER
 FSI HGI RANK GRADE

COUNTY: 7 ARCHULETA

799 RAW 3.7 38.1 48.2 13.7 0.7 12849. 5.1 69.9 1.4 8.9 56.6 14324. 2781. 4.0 51. HVA BIT LATENT

COUNTY: 13 BOULDER

799 RAW 19.5 38.9 54.4 6.7 0.4 12348. 4.7 72.8 1.6 14.9 58.7 10512. 2121. 0.0 46. HVC BIT PREMIUM

COUNTY: 29 DELTA

753 RAW 3.9 41.9 53.5 4.6 0.4 13940. 0.0 0.0 0.0 0.0 56.4 14017. 0. 0.0 0. HVA BIT PREMIUM

754 RAW 8.8 41.8 53.9 4.3 0.6 13568. 0.0 0.0 0.0 0.0 56.6 12849. 2667. 1.3 52. HVC BIT PREMIUM

799 RAW 11.9 39.6 53.2 7.2 0.7 12970. 5.1 70.7 1.6 12.1 57.8 12200. 2646. 2.7 53. HVC BIT PREMIUM

978 RAW 6.6 39.6 51.9 8.5 0.5 13330. 5.2 74.4 1.6 9.8 57.2 13554. 2560. 4.0 0. HVB BIT MARGINAL

COUNTY: 39 ELBERT

799 RAW 32.9 42.2 45.8 12.0 0.7 9430. 4.5 64.8 1.3 16.7 52.7 6885. 2280. 0.0 0. LIGNIT A

COUNTY: 41 EL PASO

733 RAW 23.4 42.1 49.2 8.7 0.4 11450. 4.5 67.3 1.0 18.5 54.4 9415. 2246. 0.0 46. SUBBIT C

COUNTY: 43 FREMONT

601 RAW 8.4 42.8 50.0 7.2 1.6 12890. 0.0 0.0 0.0 0.0 54.5 12539. 0. 0.0 0. HVC BIT MARGINAL

002 RAW 10.9 38.5 52.0 9.5 0.4 12264. 0.0 0.0 0.0 0.0 58.0 11981. 2400. 0.0 0. HVC BIT MARGINAL

002 WASH 10.6 37.9 51.2 10.9 0.4 12049. 0.0 0.0 0.0 0.0 58.1 11993. 2405. 0.0 0. HVC BIT MARGINAL

712 RAW 6.7 40.2 51.8 8.1 0.7 12736. 0.0 0.0 0.0 0.0 56.8 12548. 2179. 0.0 0. HVC BIT MARGINAL

732 RAW 8.4 40.3 51.1 8.6 0.9 12735. 5.1 71.5 1.3 12.1 56.5 12645. 2178. 0.0 50. HVC BIT MARGINAL

736 RAW 10.6 40.3 48.8 11.0 2.6 12100. 0.0 0.0 0.0 0.0 55.8 11797. 2375. 0.0 54. HVC BIT LATENT

736 WASH 11.1 41.0 49.0 10.1 2.1 12335. 0.0 0.0 0.0 0.0 55.3 11906. 2445. 0.0 0. HVC BIT LATENT

744 RAW 8.7 38.8 50.8 10.3 0.8 12365. 0.0 0.0 0.0 0.0 57.4 12476. 2223. 0.0 46. HVC BIT MARGINAL

744 WASH 10.5 39.5 49.8 10.8 1.2 12247. 0.0 0.0 0.0 0.0 56.5 12092. 2280. 0.0 42. HVC BIT MARGINAL

749 RAW 9.0 38.4 51.3 10.3 0.6 12523. 0.0 0.0 0.0 0.0 57.8 12602. 2233. 0.0 0. HVC BIT MARGINAL

758 RAW 10.6 38.3 51.0 10.7 0.5 12093. 4.8 71.6 1.1 13.8 57.8 12004. 2420. 0.0 47. HVC BIT MARGINAL

758 WASH 11.3 38.6 49.5 12.0 0.4 11887. 0.0 0.0 0.0 0.0 56.9 11850. 2449. 0.0 46. HVC BIT MARGINAL

765 RAW 10.0 39.4 51.2 9.3 0.9 12378. 4.9 68.8 1.2 12.7 57.2 12134. 2312. 0.0 46. HVC BIT MARGINAL

767 RAW 9.1 40.0 49.7 10.3 1.5 12414. 0.0 0.0 0.0 0.0 56.2 12376. 2050. 0.0 45. HVC BIT MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 8 COLORADO

BED	TYPE	*****PROXIMATE*****						*****ULTIMATE*****						AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	NMMF BTU					
COUNTY: 45 GARFIELD																		
799	RAW	10.7	39.2	51.7	9.1	0.8	12399.	4.9	71.1	1.1	13.4	57.5	12042.	2238.	0.0	48.	HVC 8IT	MARGINAL
799	WASH	10.4	38.1	50.3	11.6	0.5	11942.	0.0	0.0	0.0	0.0	57.6	11997.	2363.	0.0	41.	HVC 8IT	MARGINAL
971	RAW	10.9	39.4	49.8	10.8	1.0	12110.	0.0	0.0	0.0	0.0	56.6	11926.	2150.	0.0	0.	HVC 8IT	MARGINAL
COUNTY: 51 GUNNISON																		
715	RAW	5.1	41.3	49.8	8.8	0.6	12918.	5.2	75.0	1.6	10.8	55.2	13401.	2548.	2.5	52.	HVB 8IT	MARGINAL
718	RAW	4.0	39.7	55.2	5.1	0.5	13803.	5.4	77.9	1.8	10.7	58.6	13928.	2270.	2.5	52.	HVB 8IT	PREMIUM
759	RAW	7.7	40.7	52.2	7.1	0.7	12975.	5.2	75.4	1.8	11.7	56.7	12806.	2185.	1.0	51.	HVC 8IT	PREMIUM
799	RAW	7.4	40.5	51.9	7.6	0.9	13002.	5.2	73.1	1.7	12.1	56.7	12924.	2510.	1.3	51.	HVC 8IT	PREMIUM
COUNTY: 55 HUERFANO																		
001	RAW	5.9	39.3	50.6	10.1	0.5	12977.	0.0	0.0	0.0	0.0	56.9	13548.	2410.	0.0	0.	HVB 8IT	MARGINAL
753	RAW	5.2	39.8	51.1	9.1	0.5	13179.	0.0	0.0	0.0	0.0	56.8	13709.	2472.	2.3	45.	HVB 8IT	MARGINAL
754	RAW	5.7	40.5	53.3	6.2	0.5	13569.	5.3	75.7	1.8	9.9	57.2	13588.	2587.	2.4	51.	HVB 8IT	PREMIUM
755	RAW	6.0	40.5	52.7	6.9	0.5	13415.	0.0	0.0	0.0	0.0	57.0	13483.	2584.	1.7	52.	HVB 8IT	PREMIUM
756	RAW	6.0	41.0	54.5	4.5	0.5	13856.	5.4	78.2	1.8	10.3	57.4	13575.	2291.	2.3	53.	HVB 8IT	PREMIUM
799	RAW	7.1	34.5	59.0	6.5	0.6	13418.	5.2	74.3	1.7	12.3	63.6	13267.	2326.	0.0	49.	HVB 8IT	PREMIUM
COUNTY: 55 HUERFANO																		
001	RAW	5.9	39.8	47.0	13.3	0.6	12090.	0.0	0.0	0.0	0.0	54.9	13060.	2480.	0.0	0.	HVB 8IT	LATENT
722	RAW	3.4	40.2	49.2	10.5	0.8	13082.	0.0	0.0	0.0	0.0	55.7	14097.	2523.	3.4	48.	HVA 8IT	MARGINAL
725	RAW	7.0	39.0	48.9	12.2	0.6	12270.	5.2	73.7	1.2	11.8	56.4	12929.	2462.	0.0	44.	HVC 8IT	LATENT
725	WASH	4.0	37.3	50.1	12.7	0.7	12580.	0.0	0.0	0.0	0.0	58.1	13818.	2670.	0.0	0.	HVB 8IT	LATENT
730	RAW	4.9	37.8	46.4	13.8	0.6	12273.	4.9	71.0	1.3	10.8	57.0	13517.	2610.	0.0	43.	HVB 8IT	LATENT
745	RAW	5.4	38.5	50.2	11.3	0.6	12550.	5.0	73.3	1.3	10.1	57.3	13344.	2550.	1.7	44.	HVB 8IT	MARGINAL
763	RAW	5.9	39.1	49.5	11.4	0.9	12593.	5.1	73.1	1.4	11.5	56.6	13341.	2415.	1.5	44.	HVB 8IT	MARGINAL
763	WASH	5.4	40.3	49.7	10.0	0.9	12750.	0.0	0.0	0.0	0.0	55.9	13317.	2420.	0.0	0.	HVB 8IT	MARGINAL
799	RAW	5.5	38.6	51.0	10.4	0.7	12711.	5.1	77.9	1.6	9.5	57.5	13349.	2432.	1.0	46.	HVB 8IT	MARGINAL
799	WASH	6.9	39.5	50.4	10.2	0.8	12470.	0.0	0.0	0.0	0.0	56.7	12830.	2420.	0.0	0.	HVC 8IT	MARGINAL

BED	TYPE	*****PROXIMATE*****					*****ULTIMATE*****					AST	AVER FSI	AVER HGI	RANK	GRADE	
		MOI REC	DRY VOL MATT	DRY FIXD CAPB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY						DMMF FC
COUNTY: 57 JACKSON																	
799	RAW	16.8	40.6	52.3	7.1	0.5	12146.	4.9	69.6	1.4	16.0	56.7	10753.	2372.	0.0	37.	HVC BIT PREMIUM
COUNTY: 59 JEFFERSON																	
799	RAW	19.6	40.4	53.7	5.9	0.5	12077.	4.6	69.0	0.9	17.7	57.4	10186.	2207.	0.0	0.	SUBBIT B
COUNTY: 67 LA PLATA																	
799	RAW	3.9	39.7	53.0	7.3	1.5	13697.	5.5	78.0	1.6	8.0	57.8	14049.	2563.	4.9	50.	HVA BIT MARGINAL
COUNTY: 71 LAS ANIMAS																	
516	RAW	4.1	34.4	44.3	21.3	0.5	11743.	5.1	65.8	1.4	5.9	57.7	14383.	0.	6.9	0.	HVA BIT LATENT
516	WASH	2.9	38.9	51.5	9.6	0.5	13730.	5.6	76.5	1.6	6.2	57.6	14753.	0.	0.0	0.	HVA BIT MARGINAL
709	RAW	2.0	34.4	48.7	17.0	0.7	12585.	0.0	0.0	0.0	0.0	59.7	14928.	2875.	0.0	0.	HVA BIT LATENT
711	RAW	1.9	30.1	51.5	18.5	0.7	12437.	4.7	70.9	1.3	5.3	64.5	15059.	2910.	6.4	61.	HVA BIT LATENT
717	RAW	1.8	31.6	53.2	15.2	0.7	12895.	4.8	70.0	1.3	5.8	63.8	14980.	2890.	0.0	0.	HVA BIT LATENT
719	RAW	2.1	33.9	46.9	19.2	0.7	12180.	4.8	67.4	1.2	6.7	59.3	14848.	2910.	5.5	49.	HVA BIT LATENT
724	RAW	2.3	35.9	50.9	13.2	0.6	12825.	0.0	0.0	0.0	0.0	59.5	14468.	2843.	0.0	0.	HVA BIT LATENT
724	WASH	2.5	35.7	52.0	12.4	0.6	12975.	0.0	0.0	0.0	0.0	60.1	14451.	2860.	0.0	0.	HVA BIT LATENT
725	RAW	2.5	35.8	51.0	13.2	0.6	12840.	4.9	73.4	1.4	8.0	59.6	14441.	2885.	2.2	46.	HVA BIT LATENT
729	RAW	1.9	30.1	53.2	16.7	0.5	12706.	4.9	72.7	1.6	5.2	65.1	15073.	2618.	0.0	0.	HVA BIT LATENT
730	RAW	2.8	37.2	52.2	10.6	0.7	13153.	0.0	0.0	0.0	0.0	59.0	14293.	2903.	0.0	0.	HVA BIT MARGINAL
735	RAW	2.4	36.2	47.8	15.9	0.7	12414.	0.0	0.0	0.0	0.0	57.9	14440.	2597.	0.0	0.	HVA BIT LATENT
739	RAW	3.1	37.2	52.4	10.4	0.5	13120.	4.9	73.7	1.5	9.0	59.1	14196.	2500.	3.5	0.	HVA BIT MARGINAL
741	RAW	1.9	31.2	49.7	19.2	0.6	12164.	4.7	70.8	1.2	6.4	62.8	14877.	2864.	3.0	50.	HVA BIT LATENT
742	RAW	1.7	32.1	52.3	15.6	0.7	12725.	4.6	66.9	1.2	6.7	63.1	14892.	2909.	2.7	50.	HVA BIT LATENT
747	RAW	3.4	32.2	56.1	11.7	0.7	13217.	4.9	74.7	1.5	7.4	64.4	14451.	2910.	1.5	50.	HVA BIT MARGINAL
751	RAW	2.5	32.8	52.1	15.1	0.6	12668.	4.8	73.5	1.5	6.8	62.4	14606.	2561.	6.3	58.	HVA BIT LATENT
751	WASH	5.5	33.8	53.2	13.0	0.6	13145.	0.0	0.0	0.0	0.0	62.1	14254.	2475.	0.0	0.	HVA BIT LATENT
763	RAW	2.3	36.0	52.7	11.2	0.7	13200.	0.0	0.0	0.0	0.0	60.2	14541.	2807.	0.0	0.	HVA BIT MARGINAL
764	RAW	1.9	35.2	54.2	10.6	0.6	13452.	5.1	77.7	1.5	6.7	61.3	14774.	2614.	0.0	0.	HVA BIT MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 8 COLORADO

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE		
		MOI REC	DRY VOL	DRY FIAT	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DRY FC	DRY BTU	AST	MMMF BTU											
		*****COUNTY: 77 MESA*****																									
799	RAW	2.5	34.5	52.6	12.8	0.6	13006.	4.9	74.1	1.4	6.6	61.2	14574.	2723.	4.4	56.	HVA BIT	LATENT									
970	RAW	1.7	34.1	48.7	17.2	0.7	12442.	4.9	70.0	1.2	6.7	60.0	14860.	2903.	0.0	0.	HVA BIT	LATENT									
		*****COUNTY: 81 MOFFAT*****																									
727	RAW	8.8	39.6	51.1	9.3	0.8	12906.	5.2	73.6	1.9	10.3	57.0	12864.	2565.	1.3	47.	HVC BIT	MARGINAL									
770	RAW	7.9	38.5	50.9	10.7	0.7	12693.	4.9	71.9	1.5	10.6	57.6	13000.	2829.	1.2	53.	HVC BIT	MARGINAL									
799	RAW	8.8	40.0	52.2	7.8	0.9	13216.	5.2	75.3	1.8	10.0	57.1	12949.	2369.	2.2	49.	HVC BIT	PREMIUM									
		*****COUNTY: 83 MONTEZUMA*****																									
769	RAW	11.3	42.7	53.5	3.8	0.3	13144.	0.0	0.0	0.0	0.0	55.9	12066.	2494.	0.0	55.	HVC BIT	PREMIUM									
799	RAW	14.8	34.9	54.5	6.7	0.4	12482.	5.1	72.8	1.6	14.3	58.8	11297.	2397.	0.0	54.	HVC BIT	PREMIUM									
		*****COUNTY: 85 MONTROSE*****																									
799	RAW	5.7	33.7	56.4	10.0	0.7	13047.	0.0	0.0	0.0	0.0	63.3	13599.	2910.	1.0	53.	HVB BIT	MARGINAL									
		*****COUNTY: 97 PITKINS*****																									
704	RAW	3.5	30.3	55.6	14.1	1.2	13300.	4.9	72.8	1.9	5.1	65.9	14867.	2870.	8.0	83.	HVA BIT	LATENT									
705	RAW	2.6	30.8	60.3	8.9	1.0	14110.	5.2	76.5	2.0	6.4	67.0	15020.	2500.	7.0	89.	HVA BIT	MARGINAL									
718	RAW	3.0	33.7	58.5	7.9	0.7	14165.	5.1	79.0	1.7	5.4	64.1	14889.	2430.	7.5	70.	HVA BIT	PREMIUM									
759	RAW	3.3	38.1	53.6	8.3	0.5	13467.	5.2	76.3	1.8	8.2	59.0	14180.	2703.	3.0	52.	HVA BIT	MARGINAL									
799	RAW	4.6	23.0	68.1	9.0	0.7	14355.	4.8	81.0	1.9	2.4	75.5	15000.	2297.	9.0	110.	MV BIT	MARGINA									
974	RAW	4.8	30.3	56.8	12.9	0.9	13330.	5.0	74.6	1.8	4.8	66.2	14502.	2620.	9.0	0.	HVA BIT	LATENT									
975	RAW	3.1	29.5	58.2	12.3	1.1	13640.	0.0	0.0	0.0	0.0	67.4	15008.	2470.	8.0	86.	HVA BIT	LATENT									
		*****COUNTY: 103 RIO BLANCO*****																									
799	RAW	11.9	40.8	52.3	6.8	0.5	12723.	5.0	73.1	1.5	14.3	56.6	11926.	2732.	0.0	57.	HVC BIT	PREMIUM									

AVERAGE COALBED ANALYSES FOR STATE: 16 IDAHO

BED	TYPE	*****PROXIMATE*****					*****ULTIMATE*****					AST	AVER FSI	AVER HGI	HANA	GRADE	
		MOI REC	MOI VOL	DRY FIXD	DRY ASH	DRY SUL	DRY HTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY						DRY FC
COUNTY: 81 TETON																	
608	RAW	5.0	42.7	51.0	6.3	0.4	13470.	0.0	0.0	0.0	0.0	54.8	13630.	2100.	2.5	0.	HVB BIT PREMIUM
700	RAW	5.4	41.4	52.1	6.5	1.2	13280.	5.4	75.9	1.5	11.0	56.2	13149.	2199.	0.0	0.	HVB BIT MARGINAL

AVERAGE QUALIBED ANALYSES FOR STATE: 17 ILLINOIS

BED	TYPE ANAL	*****PROXIMATE*****				*****ULTIMATE*****				*****				AST	AVER FSI	AVER MGI	PARA	GRADE
		MOI	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY					
		REC	VOL	MATT	FIXD	ASH	DRY	SUL	BTU	DRY	HYD	DRY	DRY					
COUNTY: 5 BOND																		
484	RAW	12.3	37.9		49.0	13.1	4.2	12260.	4.7	69.2	1.2	8.5	57.9	11812.	2032.	0.0	0.	MVC BIT LATENT
COUNTY: 11 BUREAU																		
480	RAW	17.7	38.7		44.4	16.9	4.1	11780.	4.8	65.0	0.9	8.3	55.1	10971.	2100.	0.0	0.	MVC BIT LATENT
496	RAW	15.1	39.8		46.2	14.0	4.2	12384.	5.0	71.1	1.2	7.2	55.2	11598.	1992.	0.0	0.	MVC BIT LATENT
COUNTY: 13 CALHOUN																		
496	RAW	10.6	42.7		44.3	13.0	5.6	12560.	0.0	0.0	0.0	0.0	52.4	12171.	0.	0.0	0.	MVC BIT LATENT
COUNTY: 21 CHRISTIAN																		
484	RAW	13.1	40.7		45.4	13.9	4.9	12130.	5.0	69.2	1.3	8.3	54.3	11571.	2005.	4.2	60.	MVC BIT LATENT
484	WASH	14.7	42.0		46.5	11.5	4.4	12470.	4.9	69.0	1.2	9.7	53.9	11415.	2016.	0.0	0.	MVC BIT LATENT
COUNTY: 27 CLINTON																		
484	RAW	11.7	38.8		47.6	13.6	4.3	12114.	4.6	67.7	1.2	9.0	56.6	11781.	2033.	2.7	64.	MVC BIT LATENT
COUNTY: 41 DOUGLAS																		
484	RAW	13.3	42.9		47.9	9.2	2.5	13132.	0.0	0.0	0.0	0.0	53.6	12194.	2126.	3.8	56.	MVC BIT LATENT
484	WASH	13.6	43.7		48.3	8.0	2.3	13404.	5.2	75.4	1.7	8.0	53.2	12258.	2134.	3.2	56.	MVC BIT LATENT
COUNTY: 45 EDGAR																		
484	RAW	14.8	41.3		47.3	11.4	3.3	12800.	0.0	0.0	0.0	0.0	54.5	11822.	0.	0.0	0.	MVC BIT LATENT
COUNTY: 55 FRANKLIN																		
484	RAW	8.5	36.0		53.7	10.3	1.2	12967.	4.9	73.7	1.6	9.4	60.6	13057.	2347.	3.7	57.	MVC BIT MARGINAL
484	WASH	9.1	37.2		54.1	8.7	1.2	13209.	5.1	75.4	1.7	9.1	60.0	12978.	2371.	3.9	58.	MVC BIT MARGINAL
COUNTY: 57 FULTON																		
484	RAW	15.4	40.5		49.2	10.2	3.9	12842.	5.3	76.1	1.4	8.7	56.0	11565.	2092.	2.0	53.	MVC BIT LATENT
484	WASH	15.3	40.9		50.6	8.5	2.9	13133.	0.0	0.0	0.0	0.0	56.2	11757.	2158.	4.7	0.	MVC BIT LATENT
489	RAW	14.7	40.3		45.1	14.7	3.6	12151.	4.7	68.4	1.2	7.5	54.2	11582.	2014.	3.9	61.	MVC BIT LATENT
489	WASH	15.4	41.4		46.9	11.8	3.4	12550.	4.7	68.3	1.2	8.8	54.3	11582.	2019.	4.1	64.	MVC BIT LATENT
COUNTY: 59 JEFFERSON																		
496	WASH	14.0	45.2		48.8	6.0	3.2	13661.	0.0	0.0	0.0	0.0	52.7	12113.	2017.	3.1	53.	MVC BIT LATENT

AVERAGE COALBED ANALYSES FOR STATE: 17 ILLINOIS

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****					AST	AVER PSI	AVER HGI	RANK	GRADE			
		MOI REC	DRY VOL	FIXD MATT	DRY DRY	ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT						DRY UXY	OMMF FC	MMHF BTU
COUNTY: 59 GALLATIN																			
489	RAW	5.6	37.5	50.6	12.0		3.6	12953.	5.2	75.7	1.5	7.2	58.8	13441.	2091.	6.0	62.	HVB BIT	LATENT
COUNTY: 63 GRUNDY																			
480	RAW	14.2	41.7	45.6	12.7		4.7	10750.	0.0	0.0	0.0	0.0	53.6	9974.	2060.	0.0	0.	SUBBIT B	
496	RAW	15.1	40.9	48.9	10.2		3.5	12950.	5.2	73.1	1.2	8.3	55.5	11750.	1990.	0.0	0.	HVC BIT	LATENT
COUNTY: 73 HENRY																			
484	RAW	19.8	37.1	47.9	15.0		5.0	11980.	4.6	66.8	0.9	7.7	58.2	10545.	2080.	0.0	0.	HVC BIT	LATENT
484	WASH	18.2	43.3	48.6	8.1		3.1	12954.	0.0	0.0	0.0	0.0	53.8	11120.	2080.	4.2	65.	HVC BIT	LATENT
496	RAW	15.4	43.2	43.5	13.3		4.3	12090.	0.0	0.0	0.0	0.0	51.5	11186.	1980.	0.0	0.	HVC BIT	LATENT
496	WASH	16.3	44.5	44.4	11.2		4.1	12539.	5.0	70.6	1.2	9.8	51.1	11246.	1967.	0.0	0.	HVC BIT	LATENT
529	RAW	14.9	42.9	43.0	14.1		5.3	12360.	5.1	71.4	1.1	7.8	51.6	11498.	2063.	0.0	0.	HVC BIT	LATENT
COUNTY: 77 JACKSON																			
484	RAW	8.8	37.5	49.3	13.2		3.1	12428.	4.9	72.4	1.3	8.8	58.2	12450.	2180.	2.1	0.	HVC BIT	LATENT
484	WASH	8.2	38.3	51.5	10.2		2.7	12930.	5.0	74.5	1.4	8.4	58.4	12879.	2308.	5.2	55.	HVC BIT	LATENT
496	RAW	5.2	35.9	50.4	13.7		5.1	12650.	4.9	72.1	1.3	6.3	60.2	13261.	2085.	0.0	0.	HVB BIT	LATENT
529	RAW	8.9	34.8	56.5	8.7		1.2	13363.	5.0	78.4	1.6	8.5	62.6	13168.	2200.	0.0	0.	HVB BIT	MARGINAL
900	WASH	9.3	39.0	50.5	10.4		3.1	12909.	0.0	0.0	0.0	0.0	57.6	12866.	2101.	4.6	65.	HVC BIT	LATENT
COUNTY: 81 JEFFERSON																			
484	RAW	9.1	36.8	53.1	10.2		1.3	12975.	4.9	73.9	1.6	9.0	59.9	12938.	2387.	3.5	0.	HVC BIT	MARGINAL
484	WASH	10.4	37.7	53.3	8.9		1.2	13168.	5.0	74.1	1.7	9.2	59.2	12773.	2473.	4.4	59.	HVC BIT	MARGINAL
COUNTY: 91 KANKAKEE																			
001	WASH	15.1	44.3	48.1	7.6		2.9	13301.	0.0	0.0	0.0	0.0	52.9	11834.	2030.	2.7	50.	HVC BIT	LATENT
496	RAW	15.1	44.2	49.1	6.7		3.2	13415.	0.0	0.0	0.0	0.0	53.5	11815.	1945.	0.0	0.	HVC BIT	LATENT
496	WASH	16.3	43.9	50.1	6.0		2.8	13587.	0.0	0.0	0.0	0.0	54.0	11749.	1947.	0.0	0.	HVC BIT	LATENT
910	WASH	16.3	43.9	48.1	8.0		2.8	13276.	0.0	0.0	0.0	0.0	53.1	11698.	2076.	3.5	0.	HVC BIT	LATENT

AVERAGE COALBED ANALYSES FOR STATE: 17 ILLINOIS

RED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****					AST	AVER FSI	AVER HGI	MARK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	HYD	DRY CAN	DRY NIT	DRY OXY	DMMF FC				
			MATT	CARB												
422	WASH	16.0	44.3	48.1	7.6	5.0	13349.	0.0	0.0	0.0	0.0	52.9	2016.	3.5	60.	LATENT
	COUNTY: 95	KNOX														
484	RAW	17.6	39.8	45.3	10.9	3.5	12510.	4.8	69.5	1.0	8.0	56.5	2070.	1.0	50.	LATENT
484	WASH	19.0	42.4	49.1	8.5	3.1	12882.	0.0	0.0	0.0	0.0	54.5	2082.	3.5	65.	LATENT
496	RAW	13.9	45.3	45.1	9.7	3.1	13015.	0.0	0.0	0.0	0.0	50.8	0.	0.0	0.	LATENT
529	RAW	14.7	43.7	45.8	10.5	5.2	12032.	5.4	75.0	1.3	7.9	52.5	2020.	0.0	0.	LATENT
	COUNTY: 99	LA SALLE														
480	RAW	13.6	47.3	43.7	9.0	4.3	13130.	0.0	0.0	0.0	0.0	49.0	0.	0.0	0.	LATENT
496	RAW	11.7	42.1	45.0	13.0	6.3	12420.	5.0	69.9	1.1	7.4	53.3	1997.	0.0	0.	LATENT
	COUNTY: 105	LIVINGSTON														
489	RAW	12.5	38.7	44.7	16.6	3.7	12160.	4.7	67.5	1.1	6.4	55.2	2030.	0.0	0.	LATENT
	COUNTY: 107	LOGAN														
489	RAW	11.9	41.5	45.0	13.5	4.4	12176.	4.9	70.4	1.3	8.3	53.4	1925.	3.5	62.	LATENT
	COUNTY: 115	MACON														
489	RAW	12.9	39.8	47.0	13.2	3.9	12280.	5.0	69.0	1.4	8.7	55.5	1977.	0.0	0.	LATENT
	COUNTY: 117	MACOUPIN														
484	RAW	12.9	41.4	46.2	12.4	4.9	12268.	5.0	68.9	1.2	9.6	54.1	2019.	4.1	60.	LATENT
484	WASH	16.1	42.7	46.9	10.4	4.2	12615.	5.0	71.1	1.2	9.0	53.5	2081.	4.6	0.	LATENT
	COUNTY: 119	MADISON														
484	RAW	11.6	41.6	44.8	13.5	4.5	12160.	5.0	69.4	1.2	8.8	53.3	2037.	3.8	57.	LATENT
484	WASH	12.9	43.9	45.9	10.2	4.0	12706.	5.1	70.1	1.2	10.1	52.2	2086.	4.3	55.	LATENT
496	RAW	12.5	40.7	47.0	12.3	6.2	12280.	0.0	0.0	0.0	0.0	55.3	0.	0.0	0.	LATENT
	COUNTY: 121	MARION														
484	RAW	10.1	40.3	45.8	13.9	4.3	12312.	5.1	68.2	1.3	8.2	54.7	2036.	4.8	62.	LATENT
484	WASH	10.9	40.0	47.2	12.8	3.7	12508.	0.0	0.0	0.0	0.0	55.4	2085.	0.0	0.	LATENT
	COUNTY: 123	MARSHALL														
480	RAW	14.6	39.3	43.6	17.2	4.1	11920.	4.6	65.7	1.2	7.4	54.2	2040.	0.0	0.	LATENT

AVERAGE COALBED ANALYSES FOR STATE: 17 ILLINOIS

BED	TYPE ANAL	*****PROXIMATE*****							*****ULTIMATE*****							AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL MAT	DRY FIXD CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	NIT	DRY OXY	DMHF FC	MMHF BTU							
COUNTY: 129 MENARD																				
489	RAW	14.5	40.6	47.1	12.3	3.4	12690.	5.0	70.4	1.1	7.8	54.9	11862.	2010.	0.0	0.	MVC BIT	LATENT		
COUNTY: 135 MONTGOMERY																				
484	RAW	12.9	40.7	46.6	12.7	5.0	12238.	4.8	68.6	1.3	8.7	54.9	11546.	1980.	3.5	57.	MVC BIT	LATENT		
484	WASH	14.0	43.3	45.7	11.0	4.4	12495.	4.9	69.8	1.4	9.4	52.6	11493.	2031.	4.2	0.	MVC BIT	LATENT		
496	RAW	13.2	43.3	47.2	9.6	4.4	13105.	0.0	0.0	0.0	0.0	53.3	12012.	0.	0.0	0.	MVC BIT	LATENT		
COUNTY: 137 MORGAN																				
496	RAW	13.5	41.7	40.6	17.7	4.8	11870.	0.0	0.0	0.0	0.0	51.0	11732.	0.	0.0	0.	MVC BIT	LATENT		
COUNTY: 143 PEORIA																				
484	RAW	14.4	40.0	42.1	17.9	4.4	11330.	0.0	0.0	0.0	0.0	53.0	11120.	2180.	3.0	59.	MVC BIT	LATENT		
484	WASH	18.0	42.2	49.7	8.1	3.0	13111.	5.1	73.7	1.4	9.1	54.9	11283.	2175.	3.9	62.	MVC BIT	LATENT		
489	RAW	14.4	40.0	45.6	14.4	3.5	12322.	4.8	69.1	1.3	7.8	54.6	11760.	1999.	0.0	0.	MVC BIT	LATENT		
496	RAW	12.3	46.0	44.5	9.5	4.5	13076.	0.0	0.0	0.0	0.0	50.2	12107.	0.	0.0	0.	MVC BIT	LATENT		
496	WASH	13.1	47.8	45.4	6.7	3.5	13587.	0.0	0.0	0.0	0.0	49.5	12222.	2041.	2.9	52.	MVC BIT	LATENT		
COUNTY: 145 PERRY																				
484	RAW	9.9	38.6	49.3	12.1	3.3	12478.	4.8	70.7	1.4	9.4	57.4	12354.	2100.	3.8	57.	MVC BIT	LATENT		
484	WASH	10.7	39.8	50.2	10.0	2.8	12817.	4.9	72.0	1.4	9.8	56.8	12350.	2167.	4.0	57.	MVC BIT	LATENT		
489	RAW	7.9	40.4	47.4	12.3	4.5	12375.	4.8	70.7	1.3	9.1	55.4	12417.	2050.	3.0	60.	MVC BIT	LATENT		
COUNTY: 155 PUTNAM																				
496	RAW	15.1	44.2	46.1	9.7	4.0	12895.	0.0	0.0	0.0	0.0	52.1	11604.	0.	0.0	0.	MVC BIT	LATENT		
COUNTY: 157 RANDOLPH																				
484	RAW	9.9	39.3	46.3	14.5	4.0	12037.	5.1	71.2	1.3	9.6	55.6	12127.	2083.	3.7	57.	MVC BIT	LATENT		
484	WASH	10.8	41.3	47.9	10.7	3.3	12639.	5.0	69.8	1.2	9.4	54.8	12194.	2124.	3.7	61.	MVC BIT	LATENT		
489	RAW	8.1	42.9	44.1	13.0	5.7	12380.	0.0	0.0	0.0	0.0	52.2	12353.	2020.	4.0	0.	MVC BIT	LATENT		
489	WASH	9.1	43.1	44.7	12.2	4.0	12530.	0.0	0.0	0.0	0.0	52.1	12450.	2120.	3.5	57.	MVC BIT	LATENT		
COUNTY: 163 ST. CLAIR																				
484	RAW	10.0	40.2	44.9	14.9	4.5	12035.	4.9	68.8	1.2	8.2	54.3	12098.	2055.	4.4	59.	MVC BIT	LATENT		
484	WASH	11.4	43.2	46.0	10.8	3.8	12712.	5.1	70.6	1.2	9.2	52.7	12129.	2120.	3.9	60.	MVC BIT	LATENT		

AVERAGE COALBED ANALYSES FOR STATE: 17 ILLINOIS

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGT	RANK	GRADE
		MOI REC	DRY VOL MAT	DRY FIXD CARB	ASH	DRY SUL	DRY BTU	DRY HVD	DRY CAR	DRY NIT	DRY OXY	DRY FC	MMHF BTU	AST											
COUNTY: 165 SALINE																									
484	RAW	6.8	37.4	50.8	11.9	3.7	12778.	0.0	0.0	0.0	0.0	59.0	13052.	2077.	0.0	0.	HVB BIT	LATENT							
484	WASH	7.2	38.7	52.0	9.3	2.8	13282.	0.0	0.0	0.0	0.0	58.4	13242.	2217.	5.5	0.	HVB BIT	LATENT							
489	RAW	6.5	36.3	53.7	10.1	2.4	43151.	4.9	74.2	1.6	7.4	60.7	13370.	2115.	5.7	61.	HVB BIT	LATENT							
489	WASH	7.7	36.9	54.7	8.4	2.0	13447.	5.1	75.8	1.7	7.4	60.6	13280.	2152.	5.4	61.	HVB BIT	LATENT							
506	RAW	3.3	32.5	54.8	12.7	4.5	13120.	0.0	0.0	0.0	0.0	64.6	13996.	2130.	6.0	65.	HVB BIT	LATENT							
908	WASH	5.8	40.4	50.9	8.7	3.4	13511.	0.0	0.0	0.0	0.0	56.8	13524.	2094.	6.0	55.	HVB BIT	LATENT							
COUNTY: 167 SANGAMON																									
484	RAW	13.2	41.6	46.6	11.8	4.6	12410.	4.9	68.6	1.3	8.8	54.2	11601.	2010.	0.0	0.	HVC BIT	LATENT							
489	RAW	13.7	39.7	46.1	14.2	4.6	12135.	4.9	68.2	1.3	8.6	55.3	11548.	1955.	4.4	64.	HVC BIT	LATENT							
COUNTY: 169 SCHUYLER																									
489	RAW	12.5	39.6	45.1	15.2	5.1	12161.	0.0	0.0	0.0	0.0	55.0	11840.	2027.	0.0	0.	HVC BIT	LATENT							
489	WASH	13.8	40.7	46.7	12.6	4.0	12587.	0.0	0.0	0.0	0.0	54.8	11847.	2033.	4.5	67.	HVC BIT	LATENT							
COUNTY: 171 SCOTT																									
496	RAW	11.7	47.8	42.0	10.2	3.2	12970.	0.0	0.0	0.0	0.0	47.6	12318.	0.	0.0	0.	HVC BIT	LATENT							
COUNTY: 173 SHELBY																									
489	RAW	11.2	39.7	48.2	12.1	4.0	12470.	5.0	69.0	1.4	8.5	56.2	12060.	1840.	0.0	0.	HVC BIT	LATENT							
COUNTY: 175 STARK																									
484	RAW	16.6	38.4	47.2	14.4	4.6	11990.	4.9	68.8	1.0	8.0	56.8	10999.	2045.	3.5	58.	HVC BIT	LATENT							
484	WASH	17.9	42.7	49.8	7.5	3.0	13126.	5.0	73.0	1.3	9.8	54.7	11241.	2058.	3.3	59.	HVC BIT	LATENT							
COUNTY: 179 TAZEWELL																									
489	RAW	13.9	39.3	49.1	11.6	3.5	12625.	4.9	70.6	1.4	8.2	56.8	11796.	1630.	0.0	0.	HVC BIT	LATENT							
COUNTY: 183 VERMILION																									
480	RAW	12.0	42.4	44.9	12.6	3.7	12596.	5.1	70.9	1.3	8.2	52.6	12156.	2040.	0.0	0.	HVC BIT	LATENT							
480	WASH	12.4	45.8	45.2	8.9	2.9	13148.	0.0	0.0	0.0	0.0	50.5	12252.	2073.	3.4	58.	HVC BIT	LATENT							
484	RAW	13.7	40.9	48.5	10.6	2.5	12768.	5.1	72.4	1.4	9.1	55.2	11961.	2133.	0.0	0.	HVC BIT	LATENT							
484	WASH	14.2	42.0	46.6	11.4	2.7	12666.	0.0	0.0	0.0	0.0	53.5	11850.	2172.	4.0	58.	HVC BIT	LATENT							

AVERAGE COALBED ANALYSES FOR STATE: 17 ILLINOIS

BED	TYPE ANAL	*****APPROXIMATE*****					*****ULTIMATE*****					AST	AVER PSI	AVER MGI	RANK	GRADE				
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY MATT	DRY CARB	DRY SUL	DRY BTU	DRY HYD	DRY CAR						DRY NIT	DRY OXY	DMHF FC	MMHF BTU
COUNTY: 189 WASHINGTON																				
484	RAW	9.8	39.7	45.9	14.5			4.5	12099.	4.8	67.9	1.3	8.4	55.2	12161.	2031.	4.5	59.	HVC BIT	LATENT
COUNTY: 193 WHITE																				
484	RAW	8.5	38.7	51.5	9.8			3.1	13030.	4.9	72.8	1.5	7.9	58.2	12822.	2060.	0.0	0.	HVC BIT	LATENT
COUNTY: 197 WILL																				
496	RAW	16.4	40.6	51.2	8.2			3.1	13198.	5.5	74.9	1.4	9.9	56.7	11594.	2009.	2.5	0.	HVC BIT	LATENT
496	WASH	19.7	40.0	48.9	11.1			3.8	12745.	0.0	0.0	0.0	0.0	56.2	10960.	1975.	0.0	0.	HVC BIT	LATENT
COUNTY: 199 WILLIAMSON																				
001	WASH	6.7	38.4	50.9	10.7			3.0	12976.	0.0	0.0	0.0	0.0	58.1	13182.	2112.	4.2	0.	HVB BIT	LATENT
484	RAW	8.1	35.7	53.6	10.7			1.8	12900.	4.9	73.0	1.5	8.4	61.0	13040.	2324.	4.2	50.	HVB BIT	MARGINAL
484	WASH	7.6	38.4	52.7	8.9			2.2	13243.	5.0	75.5	1.7	8.9	58.7	13163.	2256.	4.5	58.	HVB BIT	LATENT
489	RAW	6.4	36.9	50.7	12.4			3.3	12691.	5.0	73.0	1.6	7.9	59.2	13148.	2057.	4.0	0.	HVB BIT	LATENT
489	WASH	7.9	37.2	53.0	9.8			2.5	13183.	0.0	0.0	0.0	0.0	59.8	13133.	2067.	5.0	59.	HVB BIT	LATENT
506	WASH	4.3	39.8	49.0	11.2			3.2	13150.	0.0	0.0	0.0	0.0	56.3	13796.	2100.	6.5	52.	HVB BIT	LATENT
900	WASH	9.0	38.4	51.2	10.5			3.3	13035.	0.0	0.0	0.0	0.0	58.3	12821.	2030.	5.5	63.	HVC BIT	LATENT
901	WASH	5.1	41.2	49.2	9.6			3.6	13405.	0.0	0.0	0.0	0.0	55.5	13644.	2052.	6.0	50.	HVB BIT	LATENT
COUNTY: 203 WOODFORD																				
496	RAW	14.3	39.3	51.7	9.0			1.7	13304.	5.2	76.7	1.4	9.0	57.6	12252.	2116.	0.0	0.	MVL BIT	MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 18 INDIANA

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY MATT	DRY FIXD	DRY CARB	DRY ASH	DRY SUL	DRY RTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DRMF FC	MMMF BTU											
COUNTY: 21 CLAY																										
489	RAW	11.9	43.3	46.3	10.4	3.8	12993.	0.0	0.0	0.0	0.0	0.0	52.7	12268.	2250.	0.0	0.	HVC BIT	LATENT							
493	RAW	14.2	38.1	50.0	12.0	1.9	12780.	0.0	0.0	0.0	0.0	0.0	57.8	12130.	2665.	0.0	0.	HVC HIT	LATENT							
502	RAW	10.2	44.8	44.5	10.7	4.6	12838.	0.0	0.0	0.0	0.0	0.0	51.0	12328.	2072.	2.0	0.	HVC BIT	LATENT							
502	WASH	11.9	45.7	44.5	9.8	4.5	13012.	0.0	0.0	0.0	0.0	0.0	50.4	12132.	2090.	3.8	61.	HVC BIT	LATENT							
537	RAW	16.3	37.9	53.4	8.7	1.5	13373.	5.4	77.5	1.4	8.7	59.2	11995.	2569.	1.0	0.	HVC BIT	MARGINAL								
990	RAW	13.1	43.0	46.3	10.7	3.8	12930.	5.3	72.2	1.3	8.3	53.0	12068.	2133.	5.5	60.	HVC BIT	LATENT								
COUNTY: 27 DAVIESS																										
799	WASH	13.7	42.8	48.8	8.4	2.9	13410.	0.0	0.0	0.0	0.0	0.0	54.2	12247.	2190.	4.2	0.	HVC BIT	LATENT							
COUNTY: 45 FOUNTAIN																										
529	RAW	13.1	45.0	44.1	10.9	3.6	12998.	0.0	0.0	0.0	0.0	0.0	50.5	12175.	2060.	4.0	0.	HVC BIT	LATENT							
COUNTY: 51 GIBSON																										
483	RAW	16.2	36.4	46.0	17.6	2.0	11390.	0.0	0.0	0.0	0.0	0.0	57.2	11132.	0.	0.0	0.	HVC BIT	LATENT							
489	RAW	10.5	38.9	50.7	10.4	3.4	12937.	0.0	0.0	0.0	0.0	0.0	57.7	12472.	2037.	4.1	0.	HVC BIT	LATENT							
489	WASH	11.3	40.7	51.6	7.7	2.4	13419.	0.0	0.0	0.0	0.0	0.0	56.7	12568.	2105.	3.6	0.	HVC BIT	LATENT							
COUNTY: 55 GREENE																										
001	WASH	13.0	40.7	47.8	11.6	3.2	12595.	0.0	0.0	0.0	0.0	0.0	55.2	11936.	2140.	3.5	0.	HVC BIT	LATENT							
480	RAW	14.3	39.7	48.9	11.4	1.5	12840.	0.0	0.0	0.0	0.0	0.0	56.0	12134.	2570.	0.0	0.	HVC BIT	MARGINAL							
480	WASH	15.4	39.7	49.9	10.4	1.4	13020.	0.0	0.0	0.0	0.0	0.0	56.4	12021.	2513.	0.0	0.	HVC BIT	MARGINAL							
483	RAW	14.4	38.7	50.0	11.3	2.4	12781.	0.0	0.0	0.0	0.0	0.0	57.4	11951.	2116.	0.0	0.	HVC BIT	LATENT							
483	WASH	15.1	39.6	51.0	9.4	2.2	13112.	5.0	71.4	1.5	8.3	57.2	11935.	2112.	3.0	54.	HVC BIT	LATENT								
489	RAW	10.9	40.6	48.8	10.6	3.5	12900.	0.0	0.0	0.0	0.0	0.0	55.7	12389.	2090.	4.0	51.	HVC BIT	LATENT							
489	WASH	12.0	42.8	47.2	10.0	3.3	13022.	5.0	72.6	1.4	8.5	53.4	12291.	2196.	3.6	56.	HVC BIT	LATENT								
490	RAW	10.9	45.0	46.4	8.6	3.0	13457.	0.0	0.0	0.0	0.0	0.0	51.6	12714.	2343.	0.0	0.	HVC BIT	LATENT							
493	RAW	14.1	40.2	49.1	10.7	2.0	13022.	5.2	74.9	1.8	9.1	55.9	12188.	2422.	0.0	0.	HVC BIT	LATENT								
493	WASH	12.1	42.9	49.7	7.3	1.4	13590.	0.0	0.0	0.0	0.0	0.0	54.2	12684.	2710.	3.5	52.	HVC BIT	MARGINAL							
502	RAW	10.6	43.0	47.0	10.0	4.6	13042.	0.0	0.0	0.0	0.0	0.0	53.4	12377.	2250.	3.0	53.	HVC BIT	LATENT							

AVERAGE COALBED ANALYSES FOR STATE: 10 INDIANA

BED	TYPE ANAL	*****PROXIMATE*****				*****ULTIMATE*****				*****				AST	AVER FSI	AVER HGI	RANK	GRADE	
		MOI REC	DRY VOL	DRY MATT	DRY FIXD CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC						MMMF BTU
502	WASH	11.8	43.6	45.7	10.7		4.7	12850.	5.1	70.4	1.4	7.7	52.4	12082.	2030.	3.5	54.	HVC BIT	LATENT
COUNTY: 83 KNOX																			
483	RAW	12.7	38.7	48.7	12.6		3.1	12580.	4.9	70.2	1.5	8.2	56.9	12100.	2224.	0.0	0.	HVC BIT	LATENT
483	WASH	11.7	41.3	47.6	11.1		2.8	12828.	0.0	0.0	0.0	0.0	54.6	12341.	2242.	4.2	60.	HVC BIT	LATENT
489	RAW	10.2	40.8	47.1	12.1		4.7	12694.	0.0	0.0	0.0	0.0	55.0	12352.	2061.	0.0	0.	HVC BIT	LATENT
489	WASH	9.3	42.7	48.0	9.3		3.4	13153.	0.0	0.0	0.0	0.0	53.9	12729.	2179.	4.5	63.	HVC BIT	LATENT
COUNTY: 119 OWEN																			
537	RAW	14.5	39.8	53.9	6.2		1.3	13782.	0.0	0.0	0.0	0.0	58.1	12365.	2693.	4.0	49.	HVC BIT	MARGINAL
545	RAW	13.0	40.7	49.1	10.2		4.2	13283.	0.0	0.0	0.0	0.0	56.0	12297.	2090.	0.0	0.	HVC BIT	LATENT
COUNTY: 125 PIKE																			
001	RAW	8.9	43.0	47.2	9.8		3.9	12958.	0.0	0.0	0.0	0.0	53.4	12590.	2042.	4.6	0.	HVC BIT	LATENT
001	WASH	7.9	44.6	46.1	9.4		3.9	13087.	0.0	0.0	0.0	0.0	51.8	12813.	2075.	0.0	0.	HVC BIT	LATENT
483	RAW	15.0	39.7	50.9	9.4		2.1	13297.	0.0	0.0	0.0	0.0	57.0	12147.	2325.	4.5	0.	HVC BIT	LATENT
489	RAW	10.2	41.6	48.2	10.2		3.7	12959.	0.0	0.0	0.0	0.0	54.8	12490.	2167.	4.1	57.	HVC BIT	LATENT
489	WASH	10.4	43.4	47.6	9.0		3.7	13125.	0.0	0.0	0.0	0.0	53.3	12452.	2127.	3.9	54.	HVC BIT	LATENT
992	RAW	12.3	42.9	46.5	10.6		4.7	12867.	0.0	0.0	0.0	0.0	53.3	12015.	2079.	4.5	52.	HVC BIT	LATENT
992	WASH	10.8	44.4	46.5	9.1		3.9	13146.	0.0	0.0	0.0	0.0	52.1	12397.	2092.	3.8	58.	HVC BIT	LATENT
COUNTY: 147 SPENCER																			
529	RAW	10.8	45.3	44.8	9.9		5.9	13010.	0.0	0.0	0.0	0.0	51.0	12149.	2050.	2.5	0.	HVC BIT	LATENT
COUNTY: 153 SULLIVAN																			
001	WASH	13.4	40.7	48.5	10.8		1.9	12906.	0.0	0.0	0.0	0.0	55.3	12209.	2350.	3.6	0.	HVC BIT	LATENT
480	RAW	13.7	38.0	51.7	10.4		1.0	12937.	0.0	0.0	0.0	0.0	58.4	12253.	2610.	4.7	52.	HVC BIT	MARGINAL
480	WASH	15.9	39.0	51.1	9.9		0.8	13087.	0.0	0.0	0.0	0.0	57.4	12013.	2639.	4.2	59.	HVC BIT	MARGINAL
483	RAW	12.4	40.8	47.7	11.4		2.7	12738.	5.2	74.2	1.0	8.5	54.9	12197.	2139.	3.4	54.	HVC BIT	LATENT
483	WASH	13.7	41.4	49.2	9.3		2.5	13163.	5.2	73.6	1.5	8.1	55.2	12171.	2122.	3.9	62.	HVC BIT	LATENT
489	RAW	14.0	38.1	53.7	8.2		1.2	13337.	5.2	76.7	1.7	9.4	59.1	12293.	2494.	0.0	0.	HVC BIT	MARGINAL
489	WASH	13.1	41.2	48.1	10.7		2.7	12945.	5.2	72.2	1.3	8.5	54.9	12198.	2413.	4.2	56.	HVC BIT	LATENT
993	WASH	11.4	42.7	48.1	9.2		2.2	13333.	0.0	0.0	0.0	0.0	53.7	12697.	2420.	0.0	0.	HVC BIT	LATENT

AVERAGE COALBED ANALYSES FOR STATE: 18 INDIANA

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****					*****					AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY MATT	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU							
COUNTY: 163 VANDERBURGH																					
489	RAW	10.3	38.5	48.1	13.4	3.5	12360.	0.0	0.0	0.0	0.0	0.0	56.9	12308.	2066.	0.0	0.	0.	HVC	BIT	LATENT
COUNTY: 165 VERMILION																					
483	RAW	11.9	42.6	46.2	11.2	3.0	12820.	0.0	0.0	0.0	0.0	0.0	53.1	12293.	2070.	4.5	57.	57.	HVC	BIT	LATENT
483	WASH	14.7	42.6	47.0	10.4	2.5	13009.	4.9	67.2	0.0	1.4	7.9	53.4	12001.	2145.	3.5	53.	53.	HVC	BIT	LATENT
489	RAW	11.0	43.7	43.7	12.6	4.3	12578.	5.2	71.0	1.3	1.3	7.9	51.2	12231.	1992.	4.7	66.	66.	HVC	BIT	LATENT
493	RAW	12.7	38.1	51.6	10.3	0.9	13080.	0.0	0.0	0.0	0.0	0.0	58.3	12546.	2632.	0.0	0.	0.	HVC	BIT	MARGINAL
COUNTY: 167 VIGO																					
480	RAW	14.1	42.0	48.6	9.4	1.3	13030.	0.0	0.0	0.0	0.0	0.0	54.3	12106.	2370.	4.0	0.	0.	HVC	BIT	MARGINAL
480	WASH	16.8	41.6	49.0	9.4	1.1	13122.	0.0	0.0	0.0	0.0	0.0	54.7	11813.	2542.	3.3	0.	0.	HVC	BIT	MARGINAL
483	RAW	13.1	43.8	46.0	10.2	3.7	12967.	5.2	72.1	1.4	1.4	8.7	52.3	12046.	1997.	4.2	60.	60.	HVC	BIT	LATENT
489	RAW	11.3	42.1	43.9	13.9	4.2	12336.	4.9	67.5	1.3	1.3	7.1	52.4	12125.	2052.	4.0	59.	59.	HVC	BIT	LATENT
489	WASH	11.8	44.3	45.2	10.6	3.7	12979.	0.0	0.0	0.0	0.0	0.0	51.5	12304.	2062.	3.6	59.	59.	HVC	BIT	LATENT
493	RAW	12.1	39.3	50.2	10.5	1.4	12955.	5.3	72.8	1.6	1.6	9.0	56.9	12481.	2471.	5.5	66.	66.	HVC	BIT	MARGINAL
493	WASH	12.5	40.2	51.3	8.6	1.3	13290.	5.2	75.8	1.7	1.7	9.3	56.7	12499.	2594.	0.0	0.	0.	HVC	BIT	MARGINAL
502	RAW	10.9	41.1	45.9	13.1	4.0	12523.	0.0	0.0	0.0	0.0	0.0	54.1	12276.	2132.	4.2	66.	66.	HVC	BIT	LATENT
502	WASH	10.3	44.2	46.7	9.1	3.9	13195.	5.3	73.6	1.4	1.4	7.9	52.4	12530.	2094.	3.9	62.	62.	HVC	BIT	LATENT
COUNTY: 173 WARRICK																					
480	RAW	14.9	36.0	55.4	8.6	1.0	12982.	0.0	0.0	0.0	0.0	0.0	61.2	11899.	2678.	0.0	0.	0.	HVC	BIT	MARGINAL
480	WASH	10.3	43.3	47.9	8.8	3.7	13099.	0.0	0.0	0.0	0.0	0.0	53.5	12429.	2071.	4.4	61.	61.	HVC	BIT	LATENT
483	RAW	11.3	39.8	50.6	9.6	3.1	12792.	5.1	75.4	1.5	1.5	10.1	57.0	12137.	2317.	2.7	53.	53.	HVC	BIT	LATENT
483	WASH	13.0	40.1	51.3	8.6	2.6	13045.	0.0	0.0	0.0	0.0	0.0	57.1	12061.	2275.	3.5	59.	59.	HVC	BIT	LATENT
489	RAW	10.4	41.6	47.4	11.1	4.4	12704.	5.1	71.5	1.3	1.3	8.2	54.6	12236.	2067.	3.6	60.	60.	HVC	BIT	LATENT
489	WASH	11.8	41.7	48.1	10.2	3.8	12868.	0.0	0.0	0.0	0.0	0.0	54.7	12136.	2164.	4.6	63.	63.	HVC	BIT	LATENT

AVERAGE COALBED ANALYSES FOR STATE: 19 IOWA

BED	TYPE ANAL	*****PROXIMATE*****				DRY SUL	DRY BTU	*****ULTIMATE*****				DRY HYD	DRY CAR	DRY NIT	DRY OXY	DHMF FC	HHMF BTU	AST	AVER FSI	AVER MGI	RANK	GRADE
		MOI REC	DRY VOL MATT	DRY FIBD	DRY ASH																	
COUNTY: 7 APPANOOSE																						
484	RAW	16.1	41.3	43.8	15.0	5.2	11923.	4.9	68.5	1.2	8.9	53.1	11008.	1974.	3.0	55.	MVC BIT	LATENT				
799	RAW	14.4	42.1	47.9	10.0	4.7	12750.	0.0	0.0	0.0	0.0	54.5	11523.	0.	0.0	0.	MVC BIT	LATENT				
COUNTY: 15 BOONE																						
530	RAW	15.4	43.0	45.6	11.4	5.5	12550.	5.0	68.6	1.0	8.5	52.9	11270.	2300.	0.0	0.	MVC BIT	LATENT				
548	RAW	20.3	37.7	40.1	22.2	9.0	10530.	0.0	0.0	0.0	0.0	54.5	9474.	2020.	0.0	0.	SUBBIT C					
COUNTY: 49 DALLAS																						
530	RAW	15.5	39.0	42.0	19.1	5.2	11299.	4.7	65.6	1.3	8.3	53.8	10979.	2075.	0.0	0.	MVC BIT	LATENT				
COUNTY: 51 DAVIS																						
799	RAW	12.2	42.5	38.5	19.0	8.6	11380.	0.0	0.0	0.0	0.0	49.8	11161.	1920.	3.0	59.	MVC BIT	LATENT				
COUNTY: 99 JASPER																						
530	RAW	15.9	41.9	41.6	16.5	6.7	11640.	4.6	63.6	1.3	7.3	51.7	10790.	2000.	0.0	0.	MVC BIT	LATENT				
799	RAW	16.7	40.4	41.4	18.2	5.4	11345.	0.0	0.0	0.0	0.0	52.4	10715.	2025.	0.0	0.	MVC BIT	LATENT				
COUNTY: 117 LUCAS																						
530	RAW	16.2	41.2	43.0	15.7	4.7	11715.	4.6	66.9	1.2	7.5	52.6	10942.	2058.	0.0	0.	MVC BIT	LATENT				
799	RAW	17.5	39.8	43.8	16.4	3.6	11633.	4.7	64.9	1.5	7.6	53.9	10869.	2061.	2.9	59.	MVC BIT	LATENT				
COUNTY: 123 MAHASKA																						
517	RAW	12.8	38.1	32.3	29.6	6.3	9570.	4.0	52.6	0.9	6.6	48.6	10740.	2190.	1.0	59.	MVC BIT	LATENT				
530	RAW	9.6	48.1	38.3	13.6	7.3	12130.	4.9	65.6	1.6	7.0	45.8	11771.	1910.	3.5	50.	MVC BIT	LATENT				
539	RAW	12.1	43.6	39.2	17.2	7.8	11450.	4.6	62.7	0.9	6.8	49.3	11118.	2070.	5.0	52.	MVC BIT	LATENT				
550	RAW	12.4	44.5	39.6	15.9	8.6	11000.	4.7	62.9	1.1	6.8	49.1	10392.	1950.	3.0	51.	SUBBIT B					
799	RAW	12.9	43.5	41.3	15.2	6.1	11895.	4.7	63.4	1.0	6.2	50.4	11401.	2015.	3.6	59.	MVC BIT	LATENT				
COUNTY: 125 MARION																						
001	RAW	17.8	40.8	43.9	15.3	6.9	11770.	4.6	64.5	1.2	7.5	53.8	10489.	2010.	0.0	0.	SUBBIT B					
484	RAW	15.7	42.8	42.1	15.1	6.0	11755.	4.9	66.8	1.2	9.1	51.2	10856.	2003.	0.0	0.	MVC BIT	LATENT				
530	RAW	15.9	41.4	42.6	16.0	5.8	11656.	4.6	65.3	1.4	7.2	52.5	10855.	2025.	2.2	62.	MVC BIT	LATENT				

AVERAGE COALBED ANALYSES FOR STATE: 19 IOWA

BED	TYPE	*****PROXIMATE*****				*****ULTIMATE*****				DRY BTU	DRY SUL	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMHF FC	MMHF BTU	AST	AVER FSI	AVER MGI	PANK	GRADE
		MOI	REC	DY	FIXD	DRY	DRY	DRY	DRY													
	ANAL			VOL	MATT	ASH	CARD															
799	RAW	10.3	41.3	41.6	17.0	0.2	11547.	4.7	64.9	1.3	6.4	52.2	10743.	2026.	2.7	64.	HVC BIT	LATENT				
COUNTY: 135 MONROE																						
530	RAW	13.9	41.2	43.6	15.1	3.9	11960.	4.6	65.8	1.3	8.3	52.8	11540.	2013.	2.2	55.	HVC BIT	LATENT				
550	RAW	13.4	45.2	38.8	16.0	6.2	11690.	4.7	64.1	1.2	7.8	47.7	11200.	2080.	3.0	51.	HVC BIT	LATENT				
799	RAW	16.2	42.6	43.5	13.9	4.9	12114.	4.9	67.5	1.2	9.0	52.0	11102.	1989.	3.5	63.	HVC BIT	LATENT				
COUNTY: 145 PAGE																						
442	RAW	20.4	43.8	43.7	12.5	4.1	12063.	4.9	67.9	1.5	9.2	51.2	10363.	2283.	0.0	0.	SUBBIT B					
COUNTY: 153 POLK																						
530	RAW	14.4	39.9	41.0	19.0	0.4	11333.	4.7	65.6	1.2	8.7	52.8	11048.	2014.	0.0	0.	HVC BIT	LATENT				
799	RAW	10.1	37.7	38.7	23.6	0.2	10760.	0.0	0.0	0.0	0.0	53.1	11721.	0.	0.0	0.	HVC BIT	LATENT				
COUNTY: 173 TAYLOR																						
442	RAW	20.5	40.4	44.6	15.0	5.1	11750.	4.7	65.6	1.3	8.5	54.1	10226.	2197.	0.0	0.	SUBBIT B					
COUNTY: 177 VAN BUREN																						
799	RAW	11.8	42.2	41.6	16.3	7.3	11815.	5.0	67.6	1.0	7.3	51.7	11462.	2080.	0.0	0.	HVC BIT	LATENT				
COUNTY: 179 WAPELLO																						
484	RAW	17.0	42.9	44.8	12.3	5.0	12317.	4.8	68.4	1.2	9.2	52.5	10973.	2333.	0.0	0.	HVC BIT	LATENT				
517	RAW	12.8	49.0	38.5	21.5	7.6	10830.	4.4	59.4	1.0	6.1	51.5	10927.	2080.	3.0	50.	HVC BIT	LATENT				
799	RAW	14.7	43.3	41.8	14.9	5.8	12063.	5.0	67.2	1.2	8.4	50.7	11282.	1987.	4.0	57.	HVC BIT	LATENT				
COUNTY: 181 WARREN																						
530	RAW	12.5	42.0	43.7	14.3	4.9	12187.	0.0	0.0	0.0	0.0	52.5	11769.	0.	0.0	0.	HVC BIT	LATENT				
799	RAW	12.9	45.4	44.2	10.4	4.2	12750.	0.0	0.0	0.0	0.0	50.4	11843.	0.	0.0	0.	HVC BIT	LATENT				
COUNTY: 185 WAYNE																						
484	RAW	18.7	42.6	44.3	13.1	6.0	12090.	4.7	66.1	1.2	8.9	52.6	10512.	1930.	0.0	0.	HVC BIT	LATENT				

AVERAGE COALBED ANALYSES FOR STATE: 19 IOWA

TYPE ANAL	*****PROXIMATE*****				*****ULTIMATE*****				AST	AVER FSI	AVER HGI	RANK	GRADE			
	MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR						DRY NIT	DRY OXY	DMMF FC
RAW	21.9	44.3	40.8	14.8	7.4	11587.	4.8	64.4	1.0	9.1	49.7	9661.	2135.	0.0	0.	SUBBIT B

COUNTY: 187 WEBSTER

AVERAGE COALBED ANALYSES FOR STATE: 20 KANSAS

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****					AST	AVER FSI	AVER HGI	RANK	GRADE	
		MOI REC	DRY VOL	DRY MATT	DRY FIXD	DRY ASH	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY						DMHF FC
440	WASH	5.3	38.5	50.7	10.9	3.8	13395.	0.0	0.0	0.0	0.0	58.1	13766.	1940.	8.5	60.	HVB BIT LATENI
COUNTY: 103 LEAVENWORTH																	
492	RAW	9.6	38.2	42.8	19.0	7.1	11510.	0.0	0.0	0.0	0.0	55.2	11866.	0.	0.0	0.	HVC BIT LATENI
COUNTY: 139 OSAGE																	
442	RAW	12.3	40.4	46.8	12.7	5.7	11940.	0.0	0.0	0.0	0.0	55.3	11273.	2120.	0.0	0.	HVL BIT LATENI

AVERAGE COALBED ANALYSES FOR STATE: 21 KENTUCKY (EAST)

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****										AVER PSI	A-ER HGI	RANK	GRADE
		MOI REC	DRY VOL. NATT	DRY FIXD CARB	DRY ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT	DRY OXY	DRY FC	MMWF BTU	AST						
COUNTY: 13 BELL																				
001	RAW	4.5	37.7	53.3	8.9	1.3	13499.	0.0	0.0	0.0	0.0	0.0	59.3	14030.	2619.	4.0	46.	HVA BIT	MARGINAL	
001	WASH	4.4	39.5	56.7	3.8	1.0	14430.	0.0	0.0	0.0	0.0	0.0	59.3	14240.	2523.	5.0	44.	HVA BIT	PREMIUM	
096	RAW	4.4	36.5	50.9	12.6	1.4	12850.	4.9	72.3	1.5	7.3	59.2	13927.	2910.	5.0	41.	HVB BIT	LATENT		
104	RAW	4.0	39.0	52.7	8.3	1.5	13623.	5.4	79.2	1.5	8.0	58.2	14109.	2675.	4.9	45.	HVA BIT	MARGINAL		
121	RAW	3.1	37.0	47.1	15.9	1.2	12120.	0.0	0.0	0.0	0.0	0.0	57.1	13912.	2570.	1.0	43.	HVB BIT	LATENT	
126	RAW	3.0	38.5	55.8	5.7	0.7	14089.	5.5	81.2	2.0	7.7	59.6	14442.	2516.	0.0	0.	HVA BIT	PREMIUM		
126	WASH	5.2	39.6	55.8	4.6	0.8	14273.	5.5	80.3	1.8	7.8	58.9	14092.	2685.	5.0	0.	HVA BIT	PREMIUM		
134	RAW	2.2	39.8	50.3	10.0	3.2	13405.	0.0	0.0	0.0	0.0	0.0	56.9	14214.	2362.	4.0	57.	HVA BIT	LATENT	
135	RAW	4.0	37.6	54.9	7.3	1.0	13678.	5.3	75.9	1.8	7.5	59.8	14281.	2601.	4.0	45.	HVA BIT	PREMIUM		
135	WASH	3.6	42.0	54.9	3.2	0.9	14510.	0.0	0.0	0.0	0.0	0.0	57.0	14353.	2470.	0.0	0.	HVA BIT	PREMIUM	
142	RAW	3.1	38.6	55.7	5.7	1.2	14192.	5.3	77.7	2.2	5.8	59.6	14475.	2481.	5.6	51.	HVA BIT	MARGINAL		
142	WASH	5.0	39.6	56.2	4.2	1.2	14368.	0.0	0.0	0.0	0.0	0.0	59.1	14104.	2527.	0.0	0.	HVA BIT	MARGINAL	
151	RAW	2.8	39.9	56.4	3.7	1.0	14566.	5.7	83.0	2.0	6.9	59.0	14592.	2211.	5.9	52.	HVA BIT	PREMIUM		
152	RAW	2.4	37.7	55.5	6.8	0.8	14029.	0.0	0.0	0.0	0.0	0.0	60.0	14638.	2487.	6.0	53.	HVA BIT	PREMIUM	
157	RAW	3.7	37.2	57.5	5.4	0.9	14241.	5.0	76.7	1.9	5.8	61.2	14406.	2454.	5.3	49.	HVA BIT	PREMIUM		
157	WASH	4.1	39.0	57.7	3.4	0.9	14615.	0.0	0.0	0.0	0.0	0.0	60.0	14426.	2640.	0.0	0.	HVA BIT	PREMIUM	
799	RAW	3.7	36.0	50.3	13.7	1.8	12794.	0.0	0.0	0.0	0.0	0.0	59.4	14105.	2722.	4.5	40.	HVA BIT	LATENT	
863	RAW	3.6	39.8	52.8	7.4	1.0	13790.	0.0	0.0	0.0	0.0	0.0	57.5	14285.	2740.	5.0	44.	HVA BIT	PREMIUM	
892	RAW	2.7	39.8	56.7	3.4	0.8	14443.	5.5	82.3	1.8	7.3	59.1	14474.	2423.	0.0	0.	HVA BIT	PREMIUM		
892	WASH	4.6	38.7	56.1	5.2	1.0	14128.	5.5	80.1	1.8	7.2	59.6	14077.	2550.	0.0	0.	HVA BIT	PREMIUM		
893	RAW	2.5	37.6	53.7	8.7	1.2	13600.	0.0	0.0	0.0	0.0	0.0	59.5	14432.	2610.	5.0	44.	HVA BIT	MARGINAL	
908	RAW	2.4	36.2	50.2	13.6	2.0	12940.	0.0	0.0	0.0	0.0	0.0	59.3	14448.	2580.	6.5	55.	HVA BIT	LATENT	
910	RAW	3.6	38.6	54.3	7.2	1.1	13902.	0.0	0.0	0.0	0.0	0.0	59.0	14332.	2822.	5.0	49.	HVA BIT	MARGINAL	
COUNTY: 19 BOYD																				
104	RAW	8.7	38.1	48.7	13.2	2.8	12293.	0.0	0.0	0.0	0.0	0.0	57.3	12553.	2251.	2.5	48.	HVC BIT	LATENT	
104	WASH	9.6	40.7	51.5	7.8	2.8	13132.	0.0	0.0	0.0	0.0	0.0	56.7	12516.	2332.	2.5	53.	HVC BIT	LATENT	
799	RAW	7.2	40.7	46.0	13.3	3.7	12230.	4.7	64.6	1.2	7.8	54.3	12613.	2325.	0.0	0.	HVC BIT	LATENT		

AVERAGE COALBED ANALYSES FOR STATE: 21 KENTUCKY (EAST)

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT	DRY OXY	DMHF FC	MMMF BTU	AST						
COUNTY: 25 BREATHITT																				
096	RAW	6.1	39.4	54.3	6.3	0.8	13750.	0.0	0.0	0.0	0.0	58.4	13692.	2910.	0.0	0.	HVB BIT	PREMIUM		
096	WASH	6.8	36.9	54.1	9.0	0.8	13231.	0.0	0.0	0.0	0.0	60.1	13475.	2910.	1.5	47.	HVB BIT	MARGINAL		
104	RAW	6.9	37.6	52.4	10.0	0.8	13220.	0.0	0.0	0.0	0.0	58.9	13580.	2910.	1.0	38.	HVB BIT	MARGINAL		
111	RAW	9.3	35.4	52.1	12.5	0.9	12390.	4.3	68.8	1.3	10.9	60.4	12700.	2910.	1.3	40.	HVC BIT	LATENT		
151	RAW	5.1	39.9	54.0	6.2	0.8	14020.	0.0	0.0	0.0	0.0	58.0	14095.	2240.	5.0	0.	HVA BIT	PREMIUM		
151	WASH	4.7	41.7	55.7	2.6	0.7	14590.	5.5	81.4	1.7	8.1	57.4	14188.	2267.	0.0	0.	HVA BIT	PREMIUM		
877	RAW	8.9	37.2	56.0	6.8	0.7	13360.	0.0	0.0	0.0	0.0	60.6	12961.	2910.	1.5	43.	HVC BIT	PREMIUM		
COUNTY: 43 CARTER																				
104	RAW	8.7	38.4	51.8	9.7	1.5	12929.	5.1	76.1	1.5	10.0	58.2	12879.	2634.	2.5	46.	HVC BIT	MARGINAL		
151	RAW	7.7	39.0	52.6	8.4	1.2	13266.	5.4	79.6	1.7	9.2	58.1	13224.	2807.	2.0	0.	HVB BIT	MARGINAL		
COUNTY: 51 CLAY																				
001	RAW	3.8	38.3	55.0	6.7	1.2	13923.	0.0	0.0	0.0	0.0	59.5	14231.	2468.	0.0	0.	HVA BIT	MARGINAL		
104	RAW	5.6	33.6	52.4	14.0	0.8	12590.	0.0	0.0	0.0	0.0	61.9	13753.	2910.	2.0	44.	HVB BIT	LATENT		
135	RAW	3.7	39.1	54.8	6.1	1.0	14042.	5.5	79.8	1.8	7.7	58.9	14302.	2677.	4.7	48.	HVA BIT	PREMIUM		
135	WASH	4.3	39.3	54.7	6.1	0.9	14042.	0.0	0.0	0.0	0.0	58.7	14223.	2758.	4.7	44.	HVA BIT	PREMIUM		
212	RAW	3.8	38.9	54.2	6.9	1.7	14001.	5.4	76.4	1.3	6.3	58.9	14277.	2427.	4.8	46.	HVA BIT	MARGINAL		
799	RAW	3.2	39.2	48.3	12.5	3.1	13030.	0.0	0.0	0.0	0.0	56.4	14069.	2250.	7.0	45.	HVA BIT	LATENT		
951	RAW	3.6	41.6	52.7	5.8	2.1	14127.	0.0	0.0	0.0	0.0	56.5	14212.	2167.	4.5	44.	HVA BIT	LATENT		
COUNTY: 65 ESTILL																				
001	WASH	2.3	41.3	54.4	4.3	1.3	14430.	0.0	0.0	0.0	0.0	57.3	14595.	2280.	6.5	0.	HVA BIT	MARGINAL		
096	WASH	6.3	38.7	53.4	7.9	1.9	13367.	0.0	0.0	0.0	0.0	58.7	13373.	2660.	2.0	0.	HVB BIT	LATENT		
135	WASH	5.1	38.0	55.0	7.0	0.8	13930.	0.0	0.0	0.0	0.0	59.7	14145.	2910.	5.5	42.	HVA BIT	PREMIUM		
151	WASH	4.2	40.1	54.7	5.2	1.3	14318.	0.0	0.0	0.0	0.0	58.2	14323.	2375.	6.5	41.	HVA BIT	MARGINAL		

AVERAGE COALBED ANALYSES FOR STATE: 21 KENTUCKY (EAST)

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY MATT	FIXD CARB	ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT	DRY OXY	DMF FC	MMMF BTU	AST										
COUNTY: 71 FLOYD																									
001	RAW	5.0	37.9		54.8	7.3	1.1	13829.	0.0	0.0	0.0	0.0	59.7	14067.	2577.	4.5	47.	HVA BIT	MARGINAL						
001	WASH	5.1	39.2		56.0	4.9	0.9	14222.	0.0	0.0	0.0	0.0	59.2	14103.	2524.	4.0	0.	HVA BIT	PREMIUM						
151	RAW	4.5	38.4		56.6	5.0	0.8	14205.	5.4	80.6	1.7	8.5	60.0	14203.	2576.	4.1	45.	HVA BIT	PREMIUM						
151	WASH	5.3	39.6		56.3	4.1	0.8	14348.	5.4	79.7	1.7	9.1	59.0	14080.	2690.	4.9	44.	HVA BIT	PREMIUM						
154	RAW	4.3	37.9		56.5	5.6	1.1	14077.	5.4	79.5	1.7	8.0	60.3	14151.	2566.	3.5	0.	HVA BIT	MARGINAL						
154	WASH	4.5	40.8		55.9	3.3	1.0	14402.	0.0	0.0	0.0	0.0	58.1	14118.	2512.	5.0	47.	HVA BIT	PREMIUM						
157	RAW	4.1	38.7		54.7	6.6	1.0	13971.	5.5	79.1	1.6	8.0	59.1	14254.	2527.	4.7	39.	HVA BIT	PREMIUM						
157	WASH	5.0	38.9		55.9	5.2	0.8	14186.	5.4	80.3	1.6	7.6	59.4	14135.	2599.	5.0	0.	HVA BIT	PREMIUM						
799	RAW	6.9	37.1		54.6	8.3	0.6	13240.	0.0	0.0	0.0	0.0	60.1	13374.	2910.	1.0	40.	HVB BIT	MARGINAL						
878	RAW	6.7	35.0		55.2	9.8	1.2	13420.	0.0	0.0	0.0	0.0	62.0	13737.	2520.	4.0	0.	HVB BIT	MARGINAL						
878	WASH	5.3	40.1		54.8	5.1	1.0	14215.	0.0	0.0	0.0	0.0	58.2	14069.	2415.	0.0	42.	HVA BIT	PREMIUM						
901	WASH	4.9	40.0		55.1	4.9	0.9	14152.	5.4	79.7	1.6	8.0	58.4	14070.	2893.	4.5	38.	HVA BIT	PREMIUM						
909	RAW	5.4	35.1		50.7	14.2	0.9	12440.	0.0	0.0	0.0	0.0	60.1	13641.	2910.	1.5	42.	HVB BIT	LATENT						
913	RAW	5.3	37.9		54.5	7.6	1.2	13733.	0.0	0.0	0.0	0.0	59.6	13956.	2437.	4.2	43.	HVB BIT	MARGINAL						
913	WASH	4.7	40.2		55.8	4.1	0.9	14342.	0.0	0.0	0.0	0.0	58.5	14149.	2517.	6.0	44.	HVA BIT	PREMIUM						
939	RAW	4.6	38.2		56.0	5.8	0.9	14057.	0.0	0.0	0.0	0.0	60.0	14140.	2516.	4.5	44.	HVA BIT	PREMIUM						
939	WASH	5.1	40.0		56.3	3.7	0.9	14417.	0.0	0.0	0.0	0.0	58.8	14112.	2710.	0.0	0.	HVA BIT	PREMIUM						
COUNTY: 89 GREENUP																									
104	RAW	10.0	37.8		51.1	11.1	3.6	12677.	0.0	0.0	0.0	0.0	58.7	12351.	2217.	0.0	0.	HVC BIT	LATENT						
COUNTY: 95 HARLAN																									
001	RAW	4.8	38.0		54.8	7.2	1.0	13673.	0.0	0.0	0.0	0.0	59.6	13927.	2645.	3.5	46.	HVB BIT	PREMIUM						
001	WASH	4.3	38.2		55.3	6.6	0.9	13968.	0.0	0.0	0.0	0.0	59.6	14220.	2802.	5.5	0.	HVA BIT	PREMIUM						
104	RAW	4.1	38.9		55.7	5.4	0.7	14017.	5.3	80.8	1.6	8.2	59.3	14147.	2557.	4.4	42.	HVA BIT	PREMIUM						
104	WASH	3.5	40.9		54.6	4.5	0.5	14190.	0.0	0.0	0.0	0.0	57.4	14302.	2690.	0.0	42.	HVA BIT	PREMIUM						
111	RAW	3.8	39.2		54.2	6.6	0.7	14000.	0.0	0.0	0.0	0.0	58.5	14376.	2805.	4.2	39.	HVA BIT	PREMIUM						
135	RAW	5.2	38.7		55.8	5.5	0.9	14002.	0.0	0.0	0.0	0.0	59.5	13951.	2479.	2.7	0.	HVB BIT	PREMIUM						
142	RAW	3.0	38.6		56.4	4.9	1.0	14317.	5.1	76.2	1.5	5.8	59.8	14519.	2494.	4.3	43.	HVA BIT	PREMIUM						
142	WASH	4.2	40.7		54.5	4.9	0.7	14130.	0.0	0.0	0.0	0.0	57.6	14161.	2452.	4.0	38.	HVA BIT	PREMIUM						
151	RAW	3.5	39.3		56.3	5.3	0.9	14174.	5.4	80.6	1.6	7.4	60.0	14357.	2350.	4.3	44.	HVA BIT	PREMIUM						

AVERAGE COALBED ANALYSES FOR STATE: 21 KENTUCKY (EAST)

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL WATT	DRY FIXED CARB	DRY ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU	AST											
COUNTY: 147 MCCREARY																									
001	RAW	3.1	39.8	52.4	7.8	2.5	13710.	0.0	0.0	0.0	0.0	57.6	14116.	0.	0.0	0.	0.	0.	0.	0.0	0.	0.	HVA BIT	LATENT	
151	RAW	0.0	35.3	52.9	11.8	1.2	13107.	4.9	73.3	1.7	7.1	60.9	13840.	2663.	5.4	45.	45.	45.	45.	5.4	45.	45.	HVB BIT	MARGINAL	
212	RAW	3.2	41.5	48.6	9.9	4.1	13450.	0.0	0.0	0.0	0.0	55.1	13953.	2122.	4.0	46.	46.	46.	46.	4.0	46.	46.	HVB BIT	LATENT	
287	RAW	3.2	41.3	47.6	11.2	4.0	13115.	0.0	0.0	0.0	0.0	54.8	13826.	2150.	0.0	0.	0.	0.	0.	0.0	0.	0.	HVB BIT	LATENT	
294	RAW	2.7	41.0	47.2	11.2	3.8	13197.	4.9	68.1	1.2	6.2	54.4	14014.	2064.	3.9	47.	47.	47.	47.	3.9	47.	47.	HVA BIT	LATENT	
303	RAW	4.4	39.0	55.6	5.4	0.5	14085.	0.0	0.0	0.0	0.0	59.1	14198.	2654.	2.7	46.	46.	46.	46.	2.7	46.	46.	HVA BIT	PREMIUM	
322	RAW	3.5	40.4	51.2	8.4	2.2	13618.	0.0	0.0	0.0	0.0	56.7	14098.	2535.	4.5	41.	41.	41.	41.	4.5	41.	41.	HVA BIT	LATENT	
871	RAW	3.6	38.1	54.2	7.7	1.7	13797.	0.0	0.0	0.0	0.0	59.4	14235.	2387.	0.0	0.	0.	0.	0.	0.0	0.	0.	HVA BIT	MARGINAL	
COUNTY: 153 MAGOFFIN																									
096	RAW	6.8	36.8	55.0	8.2	0.9	13400.	0.0	0.0	0.0	0.0	60.5	13489.	2905.	1.9	48.	48.	48.	48.	1.9	48.	48.	HVB BIT	MARGINAL	
104	RAW	6.7	37.4	54.8	7.8	0.9	13345.	0.0	0.0	0.0	0.0	60.0	13400.	2910.	2.5	44.	44.	44.	44.	2.5	44.	44.	HVB BIT	PREMIUM	
COUNTY: 159 MARTIN																									
001	WASH	6.3	38.0	54.5	7.5	0.7	13457.	4.9	75.1	1.5	9.6	59.4	13558.	2910.	2.7	41.	41.	41.	41.	2.7	41.	41.	HVB BIT	PREMIUM	
121	RAW	4.6	37.7	52.7	9.6	0.7	13363.	5.4	78.9	1.6	8.8	58.9	14063.	2899.	0.0	0.	0.	0.	0.	0.0	0.	0.	HVA BIT	MARGINAL	
121	WASH	6.7	38.1	54.5	7.4	0.7	13687.	0.0	0.0	0.0	0.0	59.4	13724.	2910.	3.0	43.	43.	43.	43.	3.0	43.	43.	HVB BIT	PREMIUM	
168	RAW	6.8	37.8	53.8	8.4	1.1	13670.	5.1	76.4	1.6	7.4	59.4	13776.	2680.	5.0	43.	43.	43.	43.	5.0	43.	43.	HVB BIT	MARGINAL	
COUNTY: 193 PERRY																									
001	RAW	4.9	37.3	55.2	7.6	0.9	13737.	0.0	0.0	0.0	0.0	60.3	14041.	2861.	3.8	43.	43.	43.	43.	3.8	43.	43.	HVA BIT	PREMIUM	
001	WASH	5.2	37.1	53.4	9.5	2.0	13425.	0.0	0.0	0.0	0.0	60.0	13825.	2485.	0.0	0.	0.	0.	0.	0.0	0.	0.	HVB BIT	LATENT	
096	RAW	4.1	39.3	52.9	7.8	2.2	13713.	5.5	80.0	1.5	7.1	58.2	14010.	2560.	4.7	41.	41.	41.	41.	4.7	41.	41.	HVA BIT	LATENT	
096	WASH	5.2	39.3	53.0	7.7	2.0	13742.	0.0	0.0	0.0	0.0	58.2	13883.	2680.	0.0	0.	0.	0.	0.	0.0	0.	0.	HVB BIT	LATENT	
104	RAW	4.7	37.2	50.0	6.8	0.7	13847.	5.4	80.9	1.5	7.5	60.6	14104.	2885.	3.2	40.	40.	40.	40.	3.2	40.	40.	HVA BIT	PREMIUM	
104	WASH	4.5	38.9	55.4	5.7	0.6	14030.	0.0	0.0	0.0	0.0	59.1	14158.	2910.	0.0	0.	0.	0.	0.	0.0	0.	0.	HVA BIT	PREMIUM	
111	RAW	5.0	37.6	54.2	8.3	0.7	13572.	5.4	80.1	1.6	7.7	59.6	14002.	2797.	3.5	42.	42.	42.	42.	3.5	42.	42.	HVA BIT	MARGINAL	
111	WASH	3.3	39.4	55.2	5.4	0.7	14164.	5.4	79.9	1.7	8.4	58.7	14343.	2769.	4.9	43.	43.	43.	43.	4.9	43.	43.	HVA BIT	PREMIUM	
335	RAW	3.4	38.5	55.9	5.6	0.9	14133.	5.5	81.3	1.7	7.3	59.7	14374.	2655.	5.4	47.	47.	47.	47.	5.4	47.	47.	HVA BIT	PREMIUM	

AVERAGE COALBED ANALYSES FOR STATE: 21 KENTUCKY (EAST)

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****					AVER FSI	AVER HGI	RANK	GRADE			
		MOI REC	DRY VOL MAT	DRY FLX CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY					DMMF FC	MMMF BTU	AST
135	WASH	5.8	38.3	54.4	7.3	0.9	13798.	0.0	0.0	0.0	0.0	59.3	13920.	2786.	4.7	47.	HVB BIT	PREMIUM
874	RAW	4.5	37.6	54.2	8.2	2.2	13650.	0.0	0.0	0.0	0.0	59.9	13950.	2500.	4.2	47.	HVB BIT	LATENT
	WASH	5.1	38.4	53.6	8.0	2.2	13530.	0.0	0.0	0.0	0.0	59.1	13708.	2385.	0.0	0.	HVB BIT	LATENT
877	RAW	5.1	38.1	53.6	8.4	2.2	13595.	0.0	0.0	0.0	0.0	59.3	13828.	2580.	4.5	42.	HVB BIT	LATENT
	WASH	4.7	39.3	53.7	7.0	1.6	13843.	0.0	0.0	0.0	0.0	58.4	13981.	2683.	0.0	0.	HVB BIT	MARGINAL
941	RAW	3.7	38.0	56.2	5.8	0.7	14127.	0.0	0.0	0.0	0.0	60.1	14378.	2910.	5.5	41.	HVA BIT	PREMIUM
942	RAW	4.3	38.1	54.5	7.4	0.7	13776.	5.4	78.7	1.7	9.1	59.4	14173.	2903.	3.8	39.	HVA BIT	PREMIUM
COUNTY: 195 PIKE																		
001	RAW	3.8	35.5	56.7	7.8	1.0	13956.	0.0	0.0	0.0	0.0	62.1	14463.	2612.	6.8	50.	HVA BIT	PREMIUM
121	RAW	3.6	39.7	55.5	4.8	0.7	14240.	0.0	0.0	0.0	0.0	58.7	14327.	0.	0.0	0.	HVA BIT	PREMIUM
151	RAW	3.8	37.2	54.1	8.7	1.3	13740.	5.1	76.4	1.4	6.6	60.0	14355.	2582.	5.3	47.	HVA BIT	MARGINAL
	WASH	4.5	41.2	53.1	5.7	1.7	14230.	5.5	79.5	1.5	6.6	56.8	14216.	2527.	5.5	46.	HVA BIT	MARGINAL
154	RAW	3.8	35.5	56.5	7.9	0.8	13923.	5.2	79.4	1.4	6.7	62.0	14487.	2706.	6.4	48.	HVA BIT	PREMIUM
	WASH	3.8	37.6	58.2	4.3	0.6	14540.	0.0	0.0	0.0	0.0	61.1	14571.	2885.	0.0	0.	HVA BIT	PREMIUM
157	RAW	3.8	34.5	57.0	8.5	0.7	13827.	5.3	83.0	1.5	6.2	62.9	14476.	2796.	5.9	50.	HVA BIT	MARGINAL
	WASH	3.1	38.2	56.2	5.6	0.8	14277.	0.0	0.0	0.0	0.0	60.0	14599.	2910.	7.0	43.	HVA BIT	PREMIUM
168	RAW	2.9	33.7	57.6	8.7	0.6	13855.	4.9	76.2	1.5	6.1	63.7	14706.	2786.	7.5	51.	HVA BIT	MARGINAL
	WASH	3.3	34.4	59.2	6.4	0.6	14311.	5.2	82.0	1.6	5.8	63.7	14745.	2908.	7.8	51.	HVA BIT	PREMIUM
174	RAW	3.0	33.5	58.4	8.2	1.4	14143.	5.1	79.2	1.7	5.4	64.3	14801.	2699.	7.4	61.	HVA BIT	MARGINAL
	WASH	4.2	31.7	60.9	7.4	0.8	14257.	0.0	0.0	0.0	0.0	66.4	14677.	2910.	0.0	0.	HVA BIT	PREMIUM
196	RAW	2.2	28.0	54.0	18.0	0.8	12530.	4.5	70.9	1.4	4.4	67.2	15003.	2840.	0.0	0.	HVA BIT	LATENT
233	RAW	1.6	32.0	58.1	10.0	3.0	13925.	4.9	77.4	1.8	3.0	65.8	14858.	2212.	6.5	66.	HVA BIT	LATENT
878	RAW	3.8	38.6	54.8	6.7	1.0	14007.	0.0	0.0	0.0	0.0	59.2	14334.	2553.	5.8	47.	HVA BIT	PREMIUM
895	RAW	2.7	33.8	59.0	7.2	0.6	14199.	5.2	81.8	1.4	5.4	64.1	14867.	2874.	7.4	0.	HVA BIT	PREMIUM
	WASH	5.3	34.6	59.4	6.0	0.6	14420.	0.0	0.0	0.0	0.0	63.6	14470.	2890.	0.0	0.	HVA BIT	PREMIUM
907	RAW	6.0	37.4	50.8	11.8	2.7	12850.	0.0	0.0	0.0	0.0	58.8	13367.	2160.	5.5	51.	HVB BIT	LATENT
913	RAW	5.3	35.5	53.2	11.3	0.9	13206.	0.0	0.0	0.0	0.0	60.8	14012.	2776.	4.5	44.	HVA BIT	MARGINAL
	WASH	6.9	37.5	57.6	4.9	0.6	14382.	0.0	0.0	0.0	0.0	61.0	14015.	2775.	3.0	39.	HVA BIT	PREMIUM
930	RAW	4.9	33.2	59.1	7.7	0.8	13980.	0.0	0.0	0.0	0.0	64.7	14346.	2845.	7.2	57.	HVA BIT	PREMIUM
939	RAW	4.2	33.9	54.5	11.7	1.0	13250.	0.0	0.0	0.0	0.0	62.5	14297.	2648.	6.7	51.	HVA BIT	MARGINAL
983	RAW	5.0	31.3	58.7	10.0	0.7	13510.	0.0	0.0	0.0	0.0	66.0	14207.	2910.	6.5	60.	HVA BIT	MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 21 KENTUCKY (EAST)

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****										AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL MATT	DRY FIXED CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU								
COUNTY: 199 PULASKI																					
287	RAW	7.1	35.3	55.1	9.6	1.6	13190.	0.0	0.0	0.0	0.0	0.0	61.8	13350.	2790.	3.5	46.	HVB BIT	MARGINAL		
COUNTY: 203 ROCKCASTLE																					
799	RAW	8.4	37.8	53.8	8.4	0.6	13355.	5.3	77.9	1.6	9.3	59.2	13270.	2910.	1.5	50.	HVB BIT	MARGINAL			
COUNTY: 235 WHITLEY																					
001	RAW	5.5	38.4	52.6	9.0	1.7	13400.	0.0	0.0	0.0	0.0	0.0	58.6	13728.	2275.	4.6	43.	HVB BIT	MARGINAL		
151	RAW	4.8	37.6	56.3	6.1	1.1	13928.	5.2	78.1	1.8	7.9	60.5	13998.	2526.	4.6	48.	HVB BIT	MARGINAL			
157	RAW	4.4	41.4	55.3	3.3	1.2	14378.	5.7	81.4	2.1	8.0	57.6	14088.	2146.	0.0	0.	HVA BIT	MARGINAL			
212	RAW	3.3	41.5	50.2	8.3	3.6	13753.	0.0	0.0	0.0	0.0	0.0	55.8	14079.	2025.	3.5	46.	HVA BIT	LATENT		
COUNTY: 31 BUTLER																					
506	RAW	10.8	40.9	53.3	5.8	1.5	13800.	0.0	0.0	0.0	0.0	0.0	57.1	12871.	2178.	1.5	0.	HVC BIT	MARGINAL		
506	WASH	10.8	42.7	54.1	3.2	1.2	14220.	0.0	0.0	0.0	0.0	0.0	56.2	12954.	2180.	0.0	42.	HVC BIT	MARGINAL		
COUNTY: 47 CHRISTIAN																					
506	RAW	10.4	39.1	53.9	7.0	2.6	13550.	5.3	78.6	1.9	8.3	58.8	12714.	2067.	0.0	0.	HVC BIT	LATENT			
COUNTY: 59 DAVIESS																					
489	RAW	11.3	39.9	46.6	13.5	4.0	12152.	0.0	0.0	0.0	0.0	0.0	55.3	11908.	2097.	4.2	0.	HVC BIT	LATENT		
799	RAW	12.2	43.1	45.2	11.8	6.7	12595.	0.0	0.0	0.0	0.0	0.0	52.8	11692.	2080.	1.0	0.	HVC BIT	LATENT		
COUNTY: 91 HANCOCK																					
506	RAW	11.0	43.9	46.4	9.7	5.6	13030.	0.0	0.0	0.0	0.0	0.0	52.7	12142.	2070.	3.5	54.	HVC BIT	LATENT		
COUNTY: 107 HOPKINS																					
001	WASH	7.7	41.8	50.4	7.7	3.4	13289.	0.0	0.0	0.0	0.0	0.0	55.6	12864.	2181.	3.5	0.	HVC BIT	LATENT		
480	RAW	6.4	36.9	47.1	14.0	4.8	12278.	0.0	0.0	0.0	0.0	0.0	56.4	12757.	2140.	4.0	0.	HVC BIT	LATENT		
480	WASH	7.5	40.2	48.3	11.5	4.6	12713.	0.0	0.0	0.0	0.0	0.0	56.0	12722.	2193.	3.5	0.	HVC BIT	LATENT		
483	RAW	6.0	40.3	45.7	14.0	3.3	12362.	0.0	0.0	0.0	0.0	0.0	54.5	12997.	2325.	4.5	0.	HVC BIT	LATENT		
483	WASH	7.7	41.8	45.9	13.3	3.2	12476.	0.0	0.0	0.0	0.0	0.0	54.1	12864.	2284.	4.7	57.	HVC BIT	LATENT		
484	RAW	6.7	40.9	49.0	10.1	4.0	12997.	5.4	75.9	1.5	8.5	55.7	12993.	2111.	5.0	57.	HVC BIT	LATENT			

AVERAGE COALBED ANALYSES FOR STATE: 21 KENTUCKY (WEST)

BED	TYPE ANAL	*****PROXIMATE*****						*****ULTIMATE*****						AVER FSI	AVER HGI	RANK	GRADE	
		MOI REC	DRY VOL MATT	DRY FIXD CARB	DRY ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU					AST
COUNTY: 177 MURLEBERG																		
484	WASH	7.5	43.0	50.3	6.7		3.4	13547.	5.2	75.6	1.5	8.2	54.8	13030.	2125.	4.4	57.	HVB BIT LATENT
489	RAW	6.6	39.7	49.2	11.2		4.1	12860.	5.0	71.2	1.5	7.8	56.7	13018.	2070.	5.1	58.	HVB BIT LATENT
489	WASH	7.2	40.7	50.1	9.2		3.5	13225.	5.0	73.3	1.6	8.1	56.3	13082.	2054.	5.1	56.	HVB BIT LATENT
506	RAW	10.2	36.3	53.5	8.2		2.6	13366.	0.0	0.0	0.0	0.0	59.2	12739.	2155.	4.3	51.	HVC BIT LATENT
506	WASH	11.1	41.7	54.2	4.1		1.8	14041.	5.4	78.3	1.9	8.8	57.0	12794.	2102.	3.9	51.	HVC BIT LATENT
COUNTY: 177 MURLEBERG																		
001	RAW	7.6	40.7	49.0	10.3		4.0	12871.	0.0	0.0	0.0	0.0	55.8	12765.	2102.	0.0	0.	HVC BIT LATENT
480	RAW	10.3	39.7	54.4	6.0		2.0	13585.	0.0	0.0	0.0	0.0	58.5	12722.	2300.	0.0	0.	HVC BIT LATENT
480	WASH	11.3	40.0	52.6	7.4		2.0	13347.	0.0	0.0	0.0	0.0	57.5	12515.	2357.	0.0	0.	HVC BIT LATENT
482	WASH	13.0	38.5	52.2	9.3		2.2	12680.	0.0	0.0	0.0	0.0	58.4	12035.	2700.	4.0	51.	HVC BIT LATENT
483	RAW	7.4	36.7	46.1	17.3		3.9	11705.	0.0	0.0	0.0	0.0	57.4	12574.	2130.	4.6	0.	HVC BIT LATENT
483	WASH	8.5	41.4	46.5	12.1		3.2	12638.	0.0	0.0	0.0	0.0	54.0	12743.	2245.	3.7	53.	HVC BIT LATENT
484	RAW	7.4	42.1	47.8	10.1		4.1	12923.	0.0	0.0	0.0	0.0	54.4	12798.	2104.	4.6	53.	HVC BIT LATENT
484	WASH	8.4	43.6	49.6	6.8		3.2	13497.	5.1	74.8	1.5	8.8	54.0	12876.	2127.	3.8	54.	HVC BIT LATENT
489	RAW	7.7	40.0	49.0	11.0		4.0	12853.	5.1	72.6	1.6	8.5	56.3	12428.	2070.	5.0	57.	HVC BIT LATENT
489	WASH	9.1	40.7	50.2	9.1		3.4	13186.	0.0	0.0	0.0	0.0	56.3	12752.	2056.	3.5	0.	HVC BIT LATENT
506	RAW	8.7	41.0	50.1	8.9		3.4	13229.	5.1	76.5	1.7	8.8	56.0	12432.	2149.	3.0	0.	HVC BIT LATENT
506	WASH	10.0	42.3	49.2	8.5		4.1	13335.	0.0	0.0	0.0	0.0	54.8	12608.	2005.	5.5	55.	HVC BIT LATENT
905	RAW	7.0	43.1	46.0	8.9		3.5	13170.	0.0	0.0	0.0	0.0	53.7	13016.	2170.	3.5	46.	HVB BIT LATENT
905	WASH	9.7	41.4	48.7	9.9		3.2	13033.	0.0	0.0	0.0	0.0	55.1	12641.	2118.	3.8	53.	HVC BIT LATENT
COUNTY: 163 OHIO																		
480	RAW	12.1	37.0	46.4	16.6		5.3	11640.	0.0	0.0	0.0	0.0	57.6	11519.	2080.	0.0	0.	HVC BIT LATENT
484	WASH	11.7	40.7	49.8	9.5		2.5	13000.	0.0	0.0	0.0	0.0	56.0	12336.	2430.	3.0	51.	HVC BIT LATENT
489	RAW	6.4	40.7	48.9	10.4		3.7	12925.	5.2	72.7	1.6	7.7	55.7	12729.	2087.	4.0	58.	HVC BIT LATENT
489	WASH	9.4	42.4	49.7	8.0		3.3	13363.	5.3	74.3	1.6	8.2	54.9	12749.	2100.	4.3	55.	HVC BIT LATENT
506	RAW	12.3	41.7	49.6	8.6		2.9	13385.	5.2	77.1	1.6	7.8	55.3	12447.	2120.	3.8	45.	HVC BIT LATENT
506	WASH	11.0	47.1	47.2	5.7		3.0	13915.	0.0	0.0	0.0	0.0	50.7	12775.	2130.	0.0	51.	HVC BIT LATENT
COUNTY: 225 UNION																		
480	RAW	6.1	37.5	53.5	9.0		2.9	13370.	0.0	0.0	0.0	0.0	59.8	13444.	2130.	5.5	62.	HVB BIT LATENT
484	RAW	6.5	40.5	47.7	11.8		4.1	12683.	4.9	71.1	1.4	7.7	55.4	12632.	2046.	6.5	56.	HVC BIT LATENT

AVERAGE COALBED ANALYSES FOR STATE: 21 KENTUCKY (WEST)

BED	TYPE ANAL	*****PROXIMATE*****				*****ULTIMATE*****				*****				AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU				
489	RAW	4.1	38.0	50.2	11.8	3.9	12997.	4.9	69.9	1.5	6.8	58.3	13669.	6.2	59.	HVB BIT	LATENT
489	WASH	9.8	41.3	49.1	9.6	3.3	12992.	4.9	72.1	1.6	9.1	55.3	12541.	3.8	56.	HVC BIT	LATENT
900	RAW	4.3	35.9	44.9	19.2	4.4	11820.	0.0	0.0	0.0	0.0	57.6	13461.	7.0	0.	HVB BIT	LATENT
902	RAW	4.0	37.2	49.3	13.6	3.9	12745.	0.0	0.0	0.0	0.0	58.5	13682.	7.5	58.	HVB BIT	LATENT
902	WASH	3.2	40.7	50.5	8.8	2.9	13570.	0.0	0.0	0.0	0.0	56.3	14073.	0.0	0.	HVA BIT	LATENT
907	RAW	4.3	35.9	44.0	19.2	4.4	11820.	0.0	0.0	0.0	0.0	57.6	13461.	7.0	0.	HVB BIT	LATENT
COUNTY: 255 WEBSTER																	
480	WASH	6.5	39.9	52.3	7.8	3.0	13499.	0.0	0.0	0.0	0.0	57.6	13319.	5.4	64.	HVB BIT	LATENT
484	WASH	6.4	40.4	51.6	8.0	3.1	13455.	0.0	0.0	0.0	0.0	57.0	13314.	5.8	61.	HVB BIT	LATENT
489	RAW	4.1	38.3	49.9	11.8	3.9	12956.	4.7	69.4	1.5	6.3	58.0	13629.	6.8	61.	HVB BIT	LATENT
900	RAW	3.8	37.9	50.9	11.2	4.3	13153.	5.3	75.1	1.6	6.6	58.8	13732.	0.0	0.	HVB BIT	LATENT

BED	TYPE	*****PROXIMATE*****					*****ULTIMATE*****					DMMF	FC	MMMF	AST	AVEN FSI	AVEN HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY								
COUNTY: 1 ALLEGANY																			
023	RAW	2.3	19.6	68.8	11.6	2.0	13710.	0.0	0.0	0.0	0.0	79.3	14977.	2553.	8.2	85.	LV	BIT	LATENT
029	RAW	2.7	19.9	71.6	8.4	1.3	14276.	4.5	80.7	1.7	2.5	79.2	15070.	2727.	8.0	97.	LV	BIT	MARGINAL
033	RAW	2.0	17.6	60.8	21.6	3.3	11890.	0.0	0.0	0.0	0.0	80.6	14560.	2595.	8.2	0.	LV	BIT	LATENT
036	RAW	3.5	18.7	72.2	9.2	0.9	14140.	4.4	80.1	1.9	2.3	80.4	14952.	2883.	8.3	0.	LV	BIT	MARGINAL
038	RAW	4.0	20.5	61.6	17.9	2.3	12173.	0.0	0.0	0.0	0.0	77.1	13993.	2487.	0.0	0.	MV	BIT	LATENT
042	RAW	2.2	18.0	68.8	13.2	2.6	13327.	0.0	0.0	0.0	0.0	81.2	14752.	2527.	7.0	0.	LV	BIT	LATENT
055	RAW	2.1	16.4	69.6	14.0	2.1	13321.	0.0	0.0	0.0	0.0	82.8	14990.	2559.	0.0	0.	LV	BIT	LATENT
062	RAW	2.9	17.3	70.2	12.5	1.6	13645.	0.0	0.0	0.0	0.0	81.7	15015.	2490.	9.0	0.	LV	BIT	LATENT
071	RAW	2.3	16.6	65.5	17.9	2.7	12490.	0.0	0.0	0.0	0.0	82.2	14620.	2720.	8.5	0.	LV	BIT	LATENT
074	RAW	4.4	16.0	78.5	5.5	1.4	14770.	0.0	0.0	0.0	0.0	83.9	14784.	2360.	0.0	0.	LV	BIT	MARGINAL
076	RAW	2.2	16.1	68.4	15.5	2.8	13030.	3.9	74.7	1.3	2.9	83.3	14818.	2635.	5.5	0.	LV	BIT	LATENT
049	RAW	4.2	17.8	71.8	10.4	0.9	13710.	0.0	0.0	0.0	0.0	81.2	14592.	2910.	3.5	99.	LV	BIT	MARGINAL
COUNTY: 23 GARRETT																			
001	RAW	3.8	16.5	70.4	13.1	1.1	13490.	0.0	0.0	0.0	0.0	82.4	14861.	2820.	4.0	0.	LV	BIT	LATENT
029	RAW	2.3	19.6	54.9	25.5	1.6	11280.	0.0	0.0	0.0	0.0	76.4	14796.	2910.	9.0	0.	MV	BIT	LATENT
036	RAW	3.0	21.0	71.7	7.3	0.8	14420.	0.0	0.0	0.0	0.0	76.1	15034.	2910.	9.0	99.	LV	BIT	PREMIUM
042	RAW	1.7	18.4	61.5	20.1	3.5	12125.	0.0	0.0	0.0	0.0	79.9	14583.	2367.	8.6	0.	LV	BIT	LATENT
055	RAW	4.8	18.9	67.4	13.8	1.1	12715.	0.0	0.0	0.0	0.0	79.5	13943.	2215.	3.0	0.	LV	BIT	LATENT
060	RAW	2.2	19.2	64.9	15.9	3.1	12980.	0.0	0.0	0.0	0.0	79.4	14778.	2180.	9.0	0.	LV	BIT	LATENT
062	RAW	2.3	20.0	67.0	13.0	3.1	13469.	0.0	0.0	0.0	0.0	78.9	14795.	2206.	9.0	0.	LV	BIT	LATENT
063	RAW	2.0	17.5	69.3	13.2	2.9	13461.	0.0	0.0	0.0	0.0	81.8	14899.	2368.	7.0	0.	LV	BIT	LATENT
063	WASH	2.2	17.9	68.6	13.5	2.6	13434.	0.0	0.0	0.0	0.0	81.3	14926.	2517.	0.0	0.	LV	BIT	LATENT
071	RAW	2.9	19.9	69.4	10.7	1.6	13867.	4.3	77.2	1.4	2.7	79.0	14942.	2671.	7.2	97.	LV	BIT	MARGINAL
074	RAW	3.5	18.2	66.7	15.1	2.8	12890.	0.0	0.0	0.0	0.0	80.7	14366.	2370.	3.0	101.	LV	BIT	LATENT
076	RAW	2.4	17.9	68.6	13.5	3.6	13350.	0.0	0.0	0.0	0.0	81.6	14656.	2400.	6.0	0.	LV	BIT	LATENT

AVERAGE COALBED ANALYSES FOR STATE: 24 MARYLAND

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY MATT	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	UMMF FC	MMMF BTU												
084	RAW	2.4	20.3	66.4	13.3	2.9	13309.	4.1	77.1	1.2	2.3	78.5	14674.	2473.	8.8	91.	LV BIT	LATENT								
084	WASH	1.7	16.8	70.6	12.6	2.1	13580.	0.0	0.0	0.0	0.0	82.5	15094.	0.	0.0	0.	LV BIT	LATENT								
087	RAW	3.0	14.3	73.4	12.4	2.8	13615.	4.1	79.1	1.3	1.6	85.8	14770.	2270.	7.5	93.	LV BIT	LATENT								
799	RAW	3.2	18.9	64.3	16.9	1.9	12755.	0.0	0.0	0.0	0.0	79.3	14704.	2670.	6.5	91.	LV BIT	LATENT								
924	RAW	2.8	21.6	69.8	8.6	1.7	14230.	0.0	0.0	0.0	0.0	77.5	14964.	2670.	9.0	98.	MV BIT	MARGINAL								
927	RAW	6.5	22.1	63.2	14.7	1.4	12670.	0.0	0.0	0.0	0.0	75.6	13719.	2910.	4.5	0.	MV BIT	LATENT								
950	RAW	2.0	16.4	71.4	12.2	2.3	13645.	0.0	0.0	0.0	0.0	83.1	15007.	2340.	0.0	0.	LV BIT	LATENT								

AVERAGE COALBED ANALYSES FOR STATE: 26 MICHIGAN

BED	TYPE ANAL	*****PROXIMATE*****						*****ULTIMATE*****						AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY MATT	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC					
COUNTY: 17 BAY																		
538	RAW	10.3	40.0	51.0		9.1	2.2	13255.	0.0	0.0	0.0	0.0	56.9	12776.	2175.	0.0	0.	HVC BIT LATENT
538	WASH	17.0	38.4	55.4		6.2	1.9	13640.	0.0	0.0	0.0	0.0	59.7	11799.	2160.	0.0	0.	HVC BIT LATENT
799	RAW	13.3	37.7	50.9		11.5	1.6	12830.	0.0	0.0	0.0	0.0	58.4	12274.	2311.	0.0	0.	HVC BIT MARGINAL
COUNTY: 63 HURON																		
799	RAW	10.5	39.7	46.0		14.4	9.0	12345.	0.0	0.0	0.0	0.0	56.1	11761.	2285.	0.0	0.	HVC BIT LATENT
COUNTY: 111 MIDLAND																		
799	RAW	12.1	36.9	52.0		11.1	1.8	12940.	0.0	0.0	0.0	0.0	59.4	12504.	0.	0.0	0.	HVC BIT MARGINAL
COUNTY: 145 SAGINAW																		
538	RAW	11.5	37.0	50.6		12.4	1.2	12750.	0.0	0.0	0.0	0.0	58.7	12657.	2260.	0.0	0.	HVC BIT LATENT
538	WASH	16.2	37.7	55.5		6.8	0.9	13580.	0.0	0.0	0.0	0.0	60.1	12033.	2260.	0.0	0.	HVC BIT PREMIUM
565	RAW	10.9	38.2	50.6		5.2	1.4	13890.	0.0	0.0	0.0	0.0	60.2	12860.	2220.	0.0	0.	HVC BIT MARGINAL
565	WASH	14.3	37.5	57.5		5.1	1.2	13840.	0.0	0.0	0.0	0.0	61.0	12326.	2202.	0.0	0.	HVC BIT MARGINAL
799	RAW	13.3	36.9	53.5		9.6	1.7	13189.	0.0	0.0	0.0	0.0	60.0	12362.	2207.	0.0	0.	HVC BIT MARGINAL
COUNTY: 155 SHIAWASSEE																		
538	RAW	13.9	36.0	52.6		11.4	1.7	12927.	0.0	0.0	0.0	0.0	60.4	12256.	2240.	0.0	0.	HVC BIT MARGINAL
799	RAW	14.4	36.5	50.0		13.5	2.0	12605.	0.0	0.0	0.0	0.0	58.9	12109.	2208.	0.0	0.	HVC BIT LATENT
COUNTY: 157 TUSCOLA																		
799	RAW	11.4	41.2	52.7		6.1	3.1	13745.	0.0	0.0	0.0	0.0	56.9	12592.	2090.	0.0	0.	HVC BIT LATENT
799	WASH	17.2	40.7	52.3		7.0	2.8	13600.	0.0	0.0	0.0	0.0	57.1	11730.	2080.	0.0	0.	HVC BIT LATENT

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE		
		MOI REC	DRY VOL	DRY MATT	DRY FIXD	DRY CARB	ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU	AST						
COUNTY: 1 ADAIR																						
492	RAW	13.4	39.4	42.6	18.0	5.2	11498.	0.0	0.0	0.0	0.0	0.0	53.8	11369.	2047.	0.0	0.	HVC BIT	LATENT			
COUNTY: 11 BARTON																						
513	RAW	5.1	35.2	55.1	9.8	4.1	13359.	0.0	0.0	0.0	0.0	0.0	62.4	13552.	2137.	0.0	0.	HVB BIT	LATENT			
513	WASH	4.2	35.7	55.2	9.2	3.8	13585.	0.0	0.0	0.0	0.0	0.0	62.0	13869.	2040.	0.0	0.	HVB BIT	LATENT			
540	RAW	5.8	34.5	49.3	16.2	4.7	12490.	0.0	0.0	0.0	0.0	0.0	60.8	13431.	2030.	7.5	57.	HVB BIT	LATENT			
545	RAW	4.5	32.4	44.6	23.0	5.6	11270.	0.0	0.0	0.0	0.0	0.0	60.7	13249.	2200.	8.0	57.	HVB BIT	LATENT			
925	RAW	5.2	30.4	41.6	28.0	4.6	10620.	4.1	58.8	5.5	4.5	60.9	13359.	2250.	6.0	65.	HVB BIT	LATENT				
COUNTY: 13 BATES																						
482	RAW	8.9	34.9	48.5	16.6	3.3	12160.	0.0	0.0	0.0	0.0	0.0	59.8	12802.	2083.	0.0	0.	HVC BIT	LATENT			
482	WASH	6.5	37.0	51.5	11.5	2.8	12982.	0.0	0.0	0.0	0.0	0.0	59.3	13054.	2118.	0.0	0.	HVB BIT	LATENT			
492	RAW	14.6	35.4	51.5	13.1	2.6	12840.	0.0	0.0	0.0	0.0	0.0	60.5	12177.	2100.	5.5	70.	HVC BIT	LATENT			
492	WASH	8.4	35.8	49.9	14.3	2.7	12585.	0.0	0.0	0.0	0.0	0.0	59.6	13086.	2104.	4.9	0.	HVB BIT	LATENT			
504	RAW	6.4	38.1	51.7	10.2	3.2	13080.	0.0	0.0	0.0	0.0	0.0	58.7	13240.	0.	0.0	0.	HVB BIT	LATENT			
COUNTY: 19 BOONE																						
492	WASH	11.6	41.4	46.8	11.8	4.7	12836.	0.0	0.0	0.0	0.0	0.0	54.5	12232.	2011.	5.0	63.	HVC BIT	LATENT			
COUNTY: 27 CALLAWAY																						
492	RAW	11.4	40.6	46.1	13.4	6.0	12559.	0.0	0.0	0.0	0.0	0.0	54.9	12057.	2042.	0.0	0.	HVC BIT	LATENT			
492	WASH	14.3	42.5	48.6	9.0	4.5	13173.	0.0	0.0	0.0	0.0	0.0	54.5	11827.	2003.	3.5	64.	HVC BIT	LATENT			
COUNTY: 47 CLAY																						
484	RAW	12.9	36.6	45.0	16.4	4.2	11803.	0.0	0.0	0.0	0.0	0.0	55.5	11668.	2088.	0.0	0.	HVC BIT	LATENT			
492	RAW	14.4	39.7	44.8	15.5	4.7	11777.	4.7	66.6	1.4	8.8	54.7	11238.	1953.	5.0	68.	HVC BIT	LATENT				
COUNTY: 61 DAVIESS																						
484	RAW	12.1	41.9	45.5	12.6	5.5	12540.	0.0	0.0	0.0	0.0	0.0	53.6	11887.	2010.	0.0	0.	HVC BIT	LATENT			
COUNTY: 83 HENRY																						
492	RAW	9.0	42.8	46.0	11.2	5.5	12872.	0.0	0.0	0.0	0.0	0.0	53.2	12486.	2010.	0.0	0.	HVC BIT	LATENT			
509	RAW	9.0	40.4	42.6	17.0	4.8	11951.	0.0	0.0	0.0	0.0	0.0	53.0	12450.	2054.	2.5	58.	HVC BIT	LATENT			

AVERAGE COALBED ANALYSES FOR STATE: 30 MONTANA

BED	TYPE	*****PRXIMATE*****					*****ULTIMATE*****					AST	AVER FSI	AVER MCI	RANK	GRADE
		MOI	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY					
ANAL	REC	NATT	VOL	FIXD	ASH	DRY	SUL	BTU	HYD	DRY	CAR	NIT	OXY	FC	DMF	BTU
COUNTY: 5 BIG HORN																
799	RAW	24.6	41.2	54.1	4.7	0.5	12475.	0.0	0.0	0.0	0.0	0.0	0.0	57.1	9739.	2284.
935	RAW	20.6	39.7	54.8	5.5	0.6	12440.	5.0	71.9	1.1	15.9	58.4	10313.	0.	0.0	0. SUBBIT B
COUNTY: 5 BLAINE																
799	RAW	24.5	37.1	51.9	11.0	0.6	11354.	0.0	0.0	0.0	0.0	0.0	0.0	59.0	9369.	2217.
COUNTY: 9 CARBON																
781	RAW	10.0	38.4	50.3	11.4	1.4	11893.	5.0	73.0	1.9	13.5	57.6	11870.	2103.	0.0	0. HVC BIT MARGINAL
781	WASH	12.1	38.7	52.9	8.3	1.5	12338.	0.0	0.0	0.0	0.0	58.4	11606.	2054.	0.0	50. HVC BIT MARGINAL
799	RAW	8.5	35.0	48.4	16.6	1.1	11330.	0.0	0.0	0.0	0.0	59.2	12250.	0.	0.0	0. HVC BIT LATENT
809	RAW	9.4	38.1	49.4	12.5	2.5	11697.	0.0	0.0	0.0	0.0	57.6	11773.	2040.	0.0	0. HVC BIT LATENT
811	RAW	9.1	39.7	50.0	10.3	2.2	12086.	0.0	0.0	0.0	0.0	56.7	11950.	2050.	0.0	0. HVC BIT LATENT
811	WASH	10.6	39.6	49.5	10.9	2.3	11928.	0.0	0.0	0.0	0.0	56.6	11650.	2050.	0.0	54. HVC BIT LATENT
812	RAW	11.5	40.6	49.2	10.2	1.9	12027.	4.9	69.9	1.9	14.8	55.6	11594.	2040.	0.0	0. HVC BIT LATENT
812	WASH	13.6	40.2	51.9	7.9	1.9	12440.	0.0	0.0	0.0	0.0	57.1	11400.	2072.	0.0	50. HVC BIT LATENT
814	RAW	9.8	38.7	48.2	13.2	2.4	11560.	0.0	0.0	0.0	0.0	56.6	11672.	2155.	0.0	0. HVC BIT LATENT
COUNTY: 13 CASCADE																
799	RAW	6.7	29.4	49.6	21.0	3.3	10768.	0.0	0.0	0.0	0.0	65.0	12288.	2864.	0.0	0. HVC BIT LATENT
816	RAW	4.2	32.3	46.6	21.1	4.2	10866.	0.0	0.0	0.0	0.0	61.3	12699.	2681.	0.0	0. HVC BIT LATENT
816	WASH	7.9	33.3	48.0	18.8	2.0	11345.	0.0	0.0	0.0	0.0	60.6	12590.	2910.	0.0	0. HVC BIT LATENT
COUNTY: 15 CHOUTEAU																
799	RAW	10.4	36.7	41.8	21.4	0.8	10017.	0.0	0.0	0.0	0.0	54.6	11221.	0.	0.0	0. HVC BIT LATENT
COUNTY: 17 CUSTER																
799	RAW	28.4	39.5	50.4	10.1	0.4	10990.	0.0	0.0	0.0	0.0	56.6	8505.	0.	0.0	0. SUBBIT C
COUNTY: 27 FERGUS																
799	RAW	12.0	34.5	49.8	15.7	1.2	10840.	0.0	0.0	0.0	0.0	60.2	11075.	0.	0.0	0. HVC BIT LATENT

AVERAGE COALBED ANALYSES FOR STATE: 30 MONTANA

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE		
		MOI REC	DRY VOL	DRY MATT	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU	AST												
COUNTY: 29 FLATHEAD																											
799	RAW	17.8	39.9	45.1	15.0	3.0	10880.	0.0	0.0	0.0	0.0	54.4	10035.	0.	0.0	0.	SUBBIT B										
COUNTY: 41 HILL																											
799	RAW	7.6	37.5	47.6	14.9	1.0	11306.	0.0	0.0	0.0	0.0	56.9	12144.	2340.	0.0	0.	HVC BIT LATENT										
COUNTY: 65 MUSSELSHELL																											
780	RAW	12.2	35.0	55.1	9.9	0.5	12414.	4.7	70.5	1.2	12.7	61.8	11969.	2404.	0.0	52.	HVC BIT MARGINAL										
780	WASH	14.1	34.8	55.3	9.8	0.8	12525.	0.0	0.0	0.0	0.0	62.1	11754.	2335.	0.0	0.	HVC BIT MARGINAL										
799	RAW	11.5	34.0	55.2	10.7	0.5	12213.	0.0	0.0	0.0	0.0	62.6	11998.	2412.	0.0	0.	HVC BIT MARGINAL										
805	RAW	15.1	35.4	54.2	10.5	1.0	12328.	0.0	0.0	0.0	0.0	61.3	11467.	2318.	0.0	0.	HVC BIT MARGINAL										
806	RAW	15.3	37.7	54.0	8.3	0.7	12480.	4.9	72.5	1.3	13.2	59.5	11367.	2482.	0.0	59.	HVC BIT MARGINAL										
807	RAW	18.9	35.0	54.8	10.2	1.0	11975.	4.5	70.9	1.2	13.6	61.8	10557.	2240.	0.0	54.	HVC BIT MARGINAL										
COUNTY: 75 POWDER RIVER																											
799	RAW	32.5	40.3	50.8	8.9	0.3	11206.	0.0	0.0	0.0	0.0	56.3	8065.	0.	0.0	0.	LIGNIT A										
COUNTY: 79 PRAIRIE																											
799	RAW	31.3	40.6	51.5	8.0	0.6	11395.	0.0	0.0	0.0	0.0	56.5	8280.	0.	0.0	0.	LIGNIT A										
COUNTY: 83 RICHLAND																											
799	RAW	37.5	40.5	47.9	11.6	1.1	10725.	4.1	64.1	1.1	18.4	55.0	7216.	2279.	0.0	54.	LIGNIT A										
COUNTY: 87 ROSEBUD																											
525	RAW	22.4	35.3	56.4	8.3	1.0	11815.	4.3	69.9	1.0	15.5	62.2	9770.	2150.	0.0	46.	SUBBIT B										
799	RAW	27.6	40.2	52.6	7.2	0.6	12053.	0.0	0.0	0.0	0.0	57.2	9191.	2223.	0.0	50.	SUBBIT C										
808	RAW	21.8	38.1	51.5	10.4	1.0	11755.	4.6	68.4	1.0	14.5	58.3	9984.	2243.	0.0	47.	SUBBIT B										
COUNTY: 91 SHERIDAN																											
799	RAW	39.0	41.2	49.5	9.3	0.8	11160.	0.0	0.0	0.0	0.0	55.2	7205.	2500.	0.0	0.	LIGNIT A										

AVERAGE COALBED ANALYSES FOR STATE: 32 NEVADA

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****					AST	AVER FSI	AVER HGI	RANK	GRADE		
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY						DMMF FC	MMMF BTU
799	RAW	2.7	23.1	23.7	53.2	1.7	6810.	3.0	37.3	0.9	3.9	56.3	14539.	2700.	0.0	0.	HVA BIT	LATENT
799	WASH	3.0	30.6	36.0	33.3	1.3	9897.	4.1	54.5	1.4	5.4	56.6	14498.	2747.	0.0	0.	HVA BIT	LATENT

COUNTY: 9 ESMERALDA

AVERAGE COALBED ANALYSES FOR STATE: 35 NEW MEXICO

*****PROXIMATE*****
 MOI DRY DRY DRY DRY
 REC VOL FIXD ASH
 MATT CARB

*****ULTIMATE*****
 DRY DRY DRY DRY DRY
 HYD CAR NIT DRY
 BTU FC

AST
 MMHF BTU
 AVER FSI
 AVER HGT
 RANK
 GRADE

COUNTY: 1 BERNALILLO

775	RAW	21.4	41.1	50.2	8.7	1.0	12355.	0.0	0.0	0.0	0.0	0.0	55.6	10389.	2160.	0.0	0.	SUBBIT B
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COUNTY: 7 COLFAX

507	RAW	3.3	37.0	53.9	9.1	0.5	13600.	5.1	76.3	1.6	7.4	59.9	14463.	2350.	8.0	54.	HVA BIT	MARGINAL
771	RAW	3.2	38.6	48.7	12.7	0.6	13080.	0.0	0.0	0.0	0.0	56.6	14506.	2868.	0.0	0.	HVA BIT	LATENT
772	RAW	5.1	36.8	47.8	15.5	0.7	12336.	5.1	73.7	1.4	8.2	57.5	13814.	2863.	2.7	53.	HVB BIT	LATENT
773	RAW	1.9	35.0	50.5	14.5	0.7	12864.	5.4	72.7	1.4	7.2	60.0	14807.	2902.	4.8	52.	HVA BIT	LATENT
773	WASH	2.6	37.3	49.3	13.4	0.6	13002.	0.0	0.0	0.0	0.0	57.8	14639.	2870.	4.5	0.	HVA BIT	LATENT
799	RAW	5.6	38.9	50.2	10.9	0.6	13020.	5.0	72.5	1.5	9.0	57.0	13747.	2878.	3.0	0.	HVB BIT	MARGINAL

COUNTY: 27 LINCOLN

799	RAW	3.2	31.0	49.5	19.5	0.7	11905.	0.0	0.0	0.0	0.0	62.8	14392.	2455.	0.0	0.	HVA BIT	LATENT
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COUNTY: 31 MCKINLEY

479	RAW	13.1	44.2	47.8	8.0	0.7	12700.	5.2	72.1	1.3	12.7	52.5	11862.	2275.	0.0	47.	HVC BIT	MARGINAL
774	RAW	13.1	40.7	48.7	10.6	0.6	12514.	5.0	67.5	1.3	11.6	55.1	11997.	2381.	0.0	55.	HVC BIT	MARGINAL
785	RAW	10.9	43.0	46.7	10.3	0.8	12637.	5.4	69.5	1.2	12.5	52.7	12394.	2648.	1.3	50.	HVC BIT	MARGINAL
799	RAW	11.4	41.8	47.6	10.6	0.7	12537.	5.1	71.1	1.2	12.3	53.8	12271.	2539.	1.4	54.	HVC BIT	MARGINAL

COUNTY: 39 RIO ARRIBA

799	RAW	3.3	39.3	50.7	10.0	1.7	13340.	5.3	73.9	1.6	7.9	57.1	14170.	2454.	3.9	46.	HVA BIT	MARGINAL
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COUNTY: 43 SANDOVAL

775	RAW	16.4	39.5	48.7	11.8	1.0	11926.	0.0	0.0	0.0	0.0	56.0	11048.	2336.	0.0	0.	HVC BIT	MARGINAL
799	RAW	18.3	40.5	52.1	7.4	1.6	12502.	0.0	0.0	0.0	0.0	56.9	10789.	2136.	0.0	51.	HVC BIT	MARGINAL

COUNTY: 45 SAN JUAN

488	RAW	10.4	38.0	40.2	21.8	0.8	10670.	4.6	60.7	1.3	10.9	52.7	12014.	2733.	0.0	44.	HVC BIT	LATENT
777	RAW	10.4	42.7	52.1	5.2	0.8	13285.	5.2	76.2	1.6	12.4	55.4	12439.	2264.	1.1	53.	HVC BIT	PREMIUM
799	RAW	10.5	41.3	47.7	11.0	0.8	12521.	5.3	68.0	1.4	10.9	54.3	12452.	2623.	0.0	0.	HVC BIT	MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 35 NEW MEXICO

BED	TYPE	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU	AST											
COUNTY: 49 SANTA FE																									
776	RAW	4.2	5.7	85.8	8.5	0.9	13615.	0.0	0.0	0.0	0.0	94.8	14179.	2305.	0.0	0.	ANTHRA								
778	RAW	2.2	33.5	54.1	12.3	0.8	12998.	0.0	0.0	0.0	0.0	62.6	14498.	2322.	0.0	0.	HVA BIT	LATENT							
799	RAW	3.0	20.1	69.8	10.2	1.0	13040.	0.0	0.0	0.0	0.0	78.7	14014.	2633.	1.0	50.	LV BIT	MARGINAL							
COUNTY: 53 SOCORRO																									
779	RAW	2.4	38.0	50.2	11.8	0.8	13118.	0.0	0.0	0.0	0.0	57.7	14521.	2812.	4.5	55.	HVA BIT	MARGINAL							
COUNTY: 61 VALENCIA																									
799	RAW	14.5	43.8	48.2	8.0	1.1	12495.	0.0	0.0	0.0	0.0	52.9	11418.	2237.	0.0	0.	HVC BIT	MARGINAL							

AVERAGE COALBED ANALYSES FOR STATE: 38 NORTH DAKOTA

BED	TYPE ANAL	*****PROXIMATE*****							*****ULTIMATE*****							AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU							
COUNTY: 1 ADAMS																				
799	RAW	33.3	41.3	42.6	16.1	1.9	10533.	0.0	0.0	0.0	0.0	51.9	7818.	2175.	0.0	56.	LIGNIT A			
COUNTY: 11 BOWMAN																				
564	RAW	41.4	42.3	43.0	14.7	1.4	10410.	4.4	61.9	0.9	16.7	51.3	6648.	2210.	0.0	0.	LIGNIT A			
799	RAW	43.4	43.6	44.7	11.7	1.5	10810.	0.0	0.0	0.0	0.0	51.4	6509.	2347.	0.0	54.	LIGNIT A			
COUNTY: 13 BURKE																				
799	RAW	34.1	39.6	47.4	13.0	0.7	10726.	4.4	63.5	1.1	16.0	55.3	7748.	2148.	0.0	41.	LIGNIT A			
COUNTY: 15 BURLEIGH																				
799	RAW	37.0	44.5	45.3	10.2	1.2	10837.	4.2	64.2	1.0	19.3	51.1	7263.	2385.	0.0	48.	LIGNIT A			
COUNTY: 23 DIVIDE																				
799	RAW	32.2	40.6	47.9	11.4	0.8	11067.	0.0	0.0	0.0	0.0	54.8	8132.	2175.	0.0	45.	LIGNIT A			
COUNTY: 25 DUNN																				
799	RAW	41.3	43.4	44.5	12.1	1.2	10624.	0.0	0.0	0.0	0.0	51.4	6684.	2361.	0.0	53.	LIGNIT A			
COUNTY: 33 GOLDEN VALLEY																				
799	RAW	41.3	45.4	44.7	9.9	1.2	10787.	0.0	0.0	0.0	0.0	50.2	6692.	2447.	0.0	48.	LIGNIT A			
COUNTY: 37 GRANT																				
799	RAW	34.4	41.2	42.1	16.7	2.7	10345.	0.0	0.0	0.0	0.0	51.8	7513.	2200.	0.0	51.	LIGNIT A			
COUNTY: 41 HETTINGER																				
799	RAW	39.6	41.8	42.7	15.6	2.3	10407.	0.0	0.0	0.0	0.0	51.7	6857.	2204.	0.0	52.	LIGNIT A			
COUNTY: 53 MCKENZIE																				
799	RAW	42.7	43.4	47.7	8.9	0.8	11042.	0.0	0.0	0.0	0.0	52.8	6656.	2315.	0.0	38.	LIGNIT A			
COUNTY: 55 MCLEAN																				
799	RAW	38.7	44.1	45.4	10.6	0.9	10796.	0.0	0.0	0.0	0.0	51.3	7054.	2401.	0.0	44.	LIGNIT A			

AVERAGE COALBED ANALYSES FOR STATE: 39 OHIO

*****PROXIMATE*****
 MOI DRY DRY DRY
 REC VOL FID ASH
 HATT CARB

*****ULTIMATE*****
 DRY DRY DRY DRY
 HYD CAR NIT OXY

AVEN AVER
 MGI FSI
 HANK GRADE

COUNTY: 31 COSHOCTON

001	RAW	5.0	40.1	43.4	12.5	5.5	12640.	0.0	0.0	0.0	0.0	51.0	13045.	0.	0.0	0.	HVB BIT	LATENT
071	RAW	8.8	43.3	49.5	7.2	4.0	13260.	0.0	0.0	0.0	0.0	54.3	12562.	2040.	3.5	53.	HVC BIT	LATENT
080	RAW	6.3	43.1	49.3	7.6	3.6	13204.	5.1	72.1	1.3	9.2	54.3	12670.	2153.	3.5	52.	HVC BIT	LATENT
080	WASH	7.8	45.8	48.5	5.7	3.5	13565.	0.0	0.0	0.0	0.0	52.1	12852.	2074.	3.5	0.	HVC BIT	LATENT
084	RAW	6.7	43.9	45.2	10.9	6.2	12857.	0.0	0.0	0.0	0.0	52.2	12696.	2247.	3.5	52.	HVC BIT	LATENT

COUNTY: 53 GALLIA

033	RAW	7.7	42.2	46.4	11.4	3.4	12584.	5.0	70.2	1.2	9.7	53.5	12688.	2300.	4.4	54.	HVC BIT	LATENT
033	WASH	8.7	43.7	47.4	8.9	2.7	13012.	5.2	73.9	1.3	9.9	52.9	13017.	2465.	4.5	0.	HVB BIT	LATENT
036	RAW	6.3	39.9	47.4	12.7	3.6	12358.	0.0	0.0	0.0	0.0	55.6	12510.	2106.	3.7	53.	HVC BIT	LATENT
084	RAW	8.7	39.8	43.1	17.1	4.9	11630.	0.0	0.0	0.0	0.0	53.7	12143.	2360.	2.5	46.	HVC BIT	LATENT

COUNTY: 59 GUERNSEY

036	RAW	4.6	42.0	45.6	12.4	4.9	12730.	0.0	0.0	0.0	0.0	53.5	13271.	2076.	4.3	55.	HVB BIT	LATENT
062	RAW	4.3	40.2	46.1	11.7	3.1	12740.	0.0	0.0	0.0	0.0	55.6	13451.	2190.	5.5	51.	HVB BIT	LATENT
062	WASH	8.0	42.1	49.7	8.2	3.3	13260.	0.0	0.0	0.0	0.0	55.1	12882.	2050.	4.0	51.	HVC BIT	LATENT
071	RAW	6.0	37.7	51.8	10.5	2.8	13022.	4.9	70.7	1.3	7.7	59.0	13343.	2290.	4.5	50.	HVB BIT	LATENT
949	RAW	3.6	40.6	47.0	12.4	4.7	12760.	0.0	0.0	0.0	0.0	55.1	13447.	2130.	5.5	52.	HVB BIT	LATENT
950	WASH	7.6	41.2	51.3	7.5	2.5	13460.	0.0	0.0	0.0	0.0	56.3	13138.	2080.	3.0	50.	HVB BIT	LATENT

COUNTY: 67 HARRISON

029	RAW	5.4	38.3	49.2	12.5	2.5	12697.	4.9	69.9	1.3	7.6	57.4	13448.	2381.	4.0	51.	HVB BIT	LATENT
033	RAW	6.1	38.9	48.5	12.6	2.7	12540.	0.0	0.0	0.0	0.0	56.6	13151.	2305.	5.0	55.	HVB BIT	LATENT
036	RAW	5.0	38.8	49.9	11.3	3.4	12965.	4.9	71.5	1.4	7.5	57.5	13483.	2150.	5.9	56.	HVB BIT	LATENT
036	WASH	4.5	41.0	51.5	7.5	2.6	13591.	0.0	0.0	0.0	0.0	56.5	13729.	2198.	5.7	51.	HVB BIT	LATENT
071	RAW	5.8	37.0	49.5	13.5	3.0	12555.	4.9	73.0	1.5	8.1	58.6	13305.	2129.	4.2	51.	HVB BIT	LATENT
074	RAW	3.4	38.7	52.7	8.6	3.0	13605.	5.1	74.5	1.5	6.2	58.6	14039.	2173.	5.5	49.	HVA BIT	LATENT
074	WASH	3.4	39.6	53.1	7.2	2.5	13809.	0.0	0.0	0.0	0.0	58.1	14104.	2233.	5.2	47.	HVA BIT	LATENT
949	RAW	8.4	36.6	51.9	11.5	1.8	12600.	0.0	0.0	0.0	0.0	59.6	12799.	2140.	3.5	50.	HVC BIT	MARGINAL
955	RAW	5.1	38.3	48.5	13.2	3.7	12705.	0.0	0.0	0.0	0.0	57.2	13440.	2130.	6.0	53.	HVB BIT	LATENT

AVERAGE COALBED ANALYSES FOR STATE: 39 OHIO

BED	TYPE ANAL	*****PROXIMATE*****								*****ULTIMATE*****								AVER FSI	AVER HGI	RANK	GRADE
		MUI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU	AST							
COUNTY: 73 HOCKING																					
080	RAW	8.3	39.0	50.9	10.0	2.2	12902.	5.1	73.6	1.5	9.7	57.5	12870.	2351.	4.5	50.	HVC BIT	LATENT			
084	RAW	9.9	41.3	48.5	10.2	2.8	12510.	0.0	0.0	0.0	0.0	55.0	12186.	2020.	1.5	45.	HVC BIT	LATENT			
COUNTY: 75																					
080	RAW	9.1	40.0	52.6	7.4	3.2	13270.	0.0	0.0	0.0	0.0	57.8	12633.	1980.	3.0	0.	HVC BIT	LATENT			
COUNTY: 79 JACKSON																					
001	WASH	8.4	44.1	47.0	9.0	3.3	12917.	0.0	0.0	0.0	0.0	52.5	12603.	2142.	3.8	0.	HVC BIT	LATENT			
071	RAW	8.7	40.2	49.4	10.4	3.8	12656.	0.0	0.0	0.0	0.0	56.3	12420.	2107.	4.5	46.	HVC BIT	LATENT			
084	RAW	8.3	39.1	51.3	9.7	2.5	12950.	0.0	0.0	0.0	0.0	57.7	12824.	2325.	0.0	0.	HVC BIT	LATENT			
087	RAW	8.5	47.1	47.5	5.4	3.3	13590.	0.0	0.0	0.0	0.0	50.9	12753.	2130.	0.0	0.	HVC BIT	LATENT			
087	WASH	8.3	44.9	46.7	8.5	3.4	13012.	0.0	0.0	0.0	0.0	51.9	12610.	2135.	4.2	51.	HVC BIT	LATENT			
095	RAW	8.3	45.2	46.8	8.2	3.9	13072.	0.0	0.0	0.0	0.0	51.7	12575.	2138.	3.5	50.	HVC BIT	LATENT			
095	WASH	10.3	44.5	47.2	8.2	3.3	13085.	0.0	0.0	0.0	0.0	52.3	12380.	2275.	3.5	45.	HVC BIT	LATENT			
121	RAW	11.1	38.2	57.2	4.7	1.1	13599.	0.0	0.0	0.0	0.0	60.4	12548.	2847.	0.0	0.	HVC BIT	MARGINAL			
285	RAW	15.2	34.2	51.4	14.4	0.6	12070.	0.0	0.0	0.0	0.0	61.0	11729.	0.	0.0	0.	HVC BIT	LATENT			
COUNTY: 81 JEFFERSON																					
023	RAW	4.1	34.5	42.1	23.4	5.0	10980.	0.0	0.0	0.0	0.0	57.4	13125.	2250.	4.5	55.	HVB BIT	LATENT			
036	RAW	4.6	38.2	51.3	10.5	3.2	13157.	5.1	73.9	1.4	7.2	58.5	13666.	2170.	6.5	55.	HVB BIT	LATENT			
036	WASH	4.0	40.2	51.6	8.2	2.7	13512.	0.0	0.0	0.0	0.0	57.1	13824.	2177.	6.6	54.	HVB BIT	LATENT			
060	RAW	5.7	37.7	51.1	11.2	2.2	13150.	0.0	0.0	0.0	0.0	58.8	13703.	2310.	6.0	52.	HVB BIT	LATENT			
074	RAW	3.4	38.7	52.5	8.8	3.1	13532.	5.0	72.8	1.2	5.5	58.6	13986.	2313.	7.0	55.	HVB BIT	LATENT			
080	RAW	3.6	37.6	52.0	10.3	2.8	13377.	5.0	73.0	1.4	6.4	59.0	14048.	2263.	6.5	53.	HVA BIT	LATENT			
084	RAW	3.6	38.4	51.6	10.0	3.0	13401.	5.2	76.7	1.5	6.9	58.4	14015.	2198.	6.4	51.	HVA BIT	LATENT			
084	WASH	3.4	40.3	51.9	7.9	2.6	13791.	5.2	76.7	1.6	6.7	57.1	14164.	2268.	5.5	0.	HVA BIT	LATENT			
955	RAW	5.7	36.4	53.8	9.8	1.0	13300.	0.0	0.0	0.0	0.0	60.4	13802.	2705.	5.5	53.	HVB BIT	MARGINAL			

AVERAGE COALBED ANALYSES FOR STATE: 39 OHIO

BED	TYPE ANAL	*****APPROXIMATE*****										*****ULTIMATE*****										AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY VOL MAT	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	DMMF BTU												
COUNTY: 87 LAWRENCE																										
033	RAW	9.3	42.2	43.1	14.7	5.5	11810.	0.0	0.0	0.0	0.0	52.1	11833.	0.	0.0	0.	HVC BIT	LATENT								
071	RAW	9.0	40.3	47.2	12.5	4.8	12410.	0.0	0.0	0.0	0.0	55.4	12293.	2062.	3.0	53.	HVC BIT	LATENT								
084	RAW	7.4	45.7	47.8	6.5	2.6	13470.	0.0	0.0	0.0	0.0	51.8	13027.	2020.	0.0	0.	HVB BIT	LATENT								
084	WASH	9.5	42.5	47.4	10.1	2.8	12702.	0.0	0.0	0.0	0.0	53.7	12430.	2175.	1.5	0.	HVC BIT	LATENT								
095	RAW	6.9	40.4	42.4	17.2	4.4	11686.	0.0	0.0	0.0	0.0	52.8	12567.	2282.	0.0	0.	HVC BIT	LATENT								
COUNTY: 99 MAHONING																										
001	RAW	4.6	38.9	55.3	5.8	1.8	13952.	0.0	0.0	0.0	0.0	59.3	13922.	2180.	5.5	0.	HVB BIT	LATENT								
080	RAW	6.1	42.5	47.0	10.6	5.8	13033.	0.0	0.0	0.0	0.0	54.0	12958.	2033.	3.5	52.	HVC BIT	LATENT								
084	RAW	5.2	35.8	46.9	17.3	3.1	12067.	0.0	0.0	0.0	0.0	58.4	13446.	2513.	4.6	55.	HVB BIT	LATENT								
095	RAW	5.5	39.3	52.6	8.1	2.5	13593.	5.2	73.4	1.5	7.2	58.1	13684.	2257.	4.6	51.	HVB BIT	LATENT								
COUNTY: 105 MEIGS																										
001	RAW	8.3	41.9	43.3	14.8	5.8	11950.	0.0	0.0	0.0	0.0	52.5	12113.	2090.	0.0	0.	HVC BIT	LATENT								
033	RAW	6.8	41.3	46.1	12.6	3.3	12477.	5.0	70.8	1.3	9.6	53.9	12899.	2265.	3.9	52.	HVC BIT	LATENT								
036	RAW	7.8	41.9	46.2	11.9	3.8	12432.	5.0	69.9	1.3	9.7	53.7	12530.	2070.	4.5	51.	HVC BIT	LATENT								
COUNTY: 115 MORGAN																										
029	RAW	5.0	41.2	43.2	15.6	5.6	12100.	0.0	0.0	0.0	0.0	52.9	12919.	2115.	5.0	0.	HVC BIT	LATENT								
036	RAW	9.3	40.6	45.3	14.1	4.5	11960.	0.0	0.0	0.0	0.0	54.2	12036.	2030.	0.0	0.	HVC BIT	LATENT								
080	RAW	7.4	41.5	49.8	8.7	2.9	13143.	0.0	0.0	0.0	0.0	55.4	12972.	2176.	4.5	55.	HVC BIT	LATENT								
080	WASH	8.0	42.4	48.9	8.6	2.1	13122.	5.3	75.5	1.4	9.7	54.3	12945.	2380.	4.5	0.	HVC BIT	LATENT								
COUNTY: 119 MUSKINGUM																										
071	RAW	6.3	43.5	43.3	13.3	5.7	12432.	0.0	0.0	0.0	0.0	51.4	12711.	2153.	3.5	54.	HVC BIT	LATENT								
080	RAW	7.0	42.5	46.3	11.3	4.4	12706.	5.4	74.2	1.5	7.9	53.4	12767.	2123.	3.5	53.	HVC BIT	LATENT								
080	WASH	7.7	44.7	47.8	7.5	3.3	13321.	5.5	74.0	1.4	10.2	52.5	12887.	2161.	3.5	51.	HVC BIT	LATENT								
087	RAW	5.3	46.5	44.1	9.4	4.2	13250.	0.0	0.0	0.0	0.0	49.7	13340.	2060.	2.5	44.	HVB BIT	LATENT								

AVERAGE COALBED ANALYSES FOR STATES 39 OHIO

BED	TYPE ANAL	*****APPROXIMATE*****					*****ULTIMATE*****					AST	AVER FSI	AVER HGI	RANK	GRADE	
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY HATT	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT						DRY OXY
COUNTY: 121 NOBLE																	
029	RAW	4.2	39.9	42.5	17.6		5.7	11844.	0.0	0.0	0.0	0.0	53.5	13056.	2102.	5.1	50. HVB BIT LATENT
071	RAW	5.4	36.4	53.9	9.7		2.7	13335.	0.0	0.0	0.0	0.0	60.8	13649.	2105.	0.0	0. HVB BIT LATENT
882	RAW	4.4	36.5	54.3	9.2		3.4	13343.	0.0	0.0	0.0	0.0	61.0	13650.	0.	0.0	0. HVB BIT LATENT
COUNTY: 127 PERRY																	
001	RAW	11.5	37.9	46.9	15.3		3.1	11915.	0.0	0.0	0.0	0.0	56.7	11986.	2490.	0.0	0. HVC BIT LATENT
071	RAW	7.6	43.1	50.5	6.4		2.3	13400.	0.0	0.0	0.0	0.0	54.6	12951.	2050.	0.0	0. HVC BIT LATENT
071	WASH	8.1	43.3	49.3	7.5		2.5	13235.	0.0	0.0	0.0	0.0	54.0	12842.	2180.	0.0	0. HVC BIT LATENT
080	RAW	8.5	40.6	49.2	10.2		2.7	12787.	4.9	69.9	1.4	9.8	55.8	12689.	2372.	3.3	49. HVC BIT LATENT
080	WASH	7.9	43.6	47.3	9.0		3.2	12994.	5.0	72.9	1.4	9.7	52.9	12760.	2236.	3.7	50. HVC BIT LATENT
084	RAW	9.0	41.9	48.5	9.6		3.5	12907.	5.0	69.8	1.5	9.1	54.6	12556.	2097.	3.6	50. HVC BIT LATENT
928	WASH	9.7	44.6	47.1	8.3		3.4	13070.	0.0	0.0	0.0	0.0	52.2	12437.	2212.	4.0	0. HVC BIT LATENT
COUNTY: 133 PORTAGE																	
095	RAW	6.0	40.6	48.2	11.3		3.5	12950.	0.0	0.0	0.0	0.0	55.5	13300.	2235.	4.0	50. HVB BIT LATENT
095	WASH	7.7	37.4	44.0	18.6		3.7	11710.	0.0	0.0	0.0	0.0	55.8	12733.	2575.	3.0	0. HVC BIT LATENT
COUNTY: 151 STARK																	
080	RAW	6.8	39.4	48.2	12.4		4.0	12613.	5.1	73.9	1.4	8.1	56.3	12929.	2204.	2.6	54. HVC BIT LATENT
084	RAW	6.6	41.6	46.6	11.8		6.5	12715.	0.0	0.0	0.0	0.0	54.6	12670.	2092.	4.2	53. HVC BIT LATENT
095	RAW	3.8	39.1	48.4	12.5		3.4	12630.	0.0	0.0	0.0	0.0	56.6	13497.	0.	0.0	0. HVB BIT LATENT
COUNTY: 157 TUSCARAWAS																	
080	RAW	6.4	41.1	47.5	11.4		4.2	12790.	0.0	0.0	0.0	0.0	54.8	12980.	2140.	3.7	52. HVC BIT LATENT
080	WASH	5.6	42.9	50.0	7.1		2.6	13581.	5.2	75.9	1.5	8.5	54.6	13478.	2184.	4.0	0. HVB BIT LATENT
084	RAW	7.5	42.3	46.8	10.9		4.4	12835.	5.3	73.3	1.3	8.7	53.8	12762.	2092.	3.2	52. HVC BIT LATENT
103	RAW	5.0	43.0	43.1	13.9		4.6	12475.	5.2	70.7	1.4	7.8	51.5	13172.	2077.	0.0	0. HVB BIT LATENT
884	RAW	9.3	41.5	45.8	12.7		4.3	12520.	0.0	0.0	0.0	0.0	53.8	12442.	2120.	3.0	0. HVC BIT LATENT
928	WASH	10.9	42.1	50.4	7.5		3.5	13180.	0.0	0.0	0.0	0.0	55.4	12262.	2055.	4.0	0. HVC BIT LATENT

AVERAGE COALBED ANALYSES FOR STATE: 39 OHIO

BED	TYPE ANAL	*****PROXIMATE*****				*****ULTIMATE*****				AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU	
			HATT	CARB										
COUNTY: 163 VINTON														
001	RAW	11.5	39.7	45.6	14.7	3.2	11700.	0.0	0.0	0.0	0.0	54.8	11671.	0. HVC BIT LATENT
080	RAW	6.9	42.1	53.0	5.0	1.9	13523.	5.3	75.1	1.5	10.0	56.3	12743.	2.2 44. HVC BIT LATENT
084	RAW	9.5	38.1	45.9	16.0	5.2	11792.	0.0	0.0	0.0	0.0	56.5	12010.	3.0 47. HVC BIT LATENT
087	RAW	6.5	43.8	45.4	10.8	4.2	12819.	5.1	68.5	1.2	6.7	52.0	12916.	1.5 49. HVC BIT LATENT
087	WASH	8.6	45.5	45.5	9.0	3.5	13104.	0.0	0.0	0.0	0.0	50.9	12726.	3.4 47. HVC BIT LATENT
COUNTY: 167 WASHINGTON														
029	RAW	4.5	39.7	41.5	18.6	5.8	11770.	0.0	0.0	0.0	0.0	53.1	13116.	5.0 50. HVB BIT LATENT

AVERAGE COALBED ANALYSES FOR STATES 40 OKLAHOMA

*****PROXIMATE*****
 MOI DRY DRY DRY
 REC VOL FIXD ASH
 MATT CARB

*****ULTIMATE*****
 DRY DRY DRY
 HTU CAR NIT OXY
 FC

ABT
 AVER
 FBI
 AVER
 HGT
 HANK
 GRADE

COUNTY: 29 COAL

558	RAW	7.4	40.8	47.4	11.8	4.0	12166.	4.8	70.1	1.7	10.4	55.0	12266.	2136.	0.0	0.	HVC BIT	LATENT
911	RAW	7.8	43.2	47.0	9.8	4.0	12400.	0.0	0.0	0.0	0.0	53.2	12191.	2320.	0.0	0.	HVC BIT	LATENT

COUNTY: 35 CRAIG

490	WASH	3.5	45.0	47.9	7.1	3.5	13910.	5.5	76.8	1.5	5.6	52.4	14032.	2050.	8.5	58.	HVA BIT	LATENT
496	RAW	8.7	33.1	55.6	11.3	0.6	13083.	0.0	0.0	0.0	0.0	63.4	13371.	2461.	5.2	62.	HVB BIT	MARGINAL
504	RAW	5.3	37.4	48.8	13.8	4.5	12890.	0.0	0.0	0.0	0.0	58.2	13594.	2300.	0.0	0.	HVB BIT	LATENT
507	RAW	5.5	36.1	48.8	15.1	6.0	12470.	0.0	0.0	0.0	0.0	59.6	13113.	1950.	8.5	57.	HVB BIT	LATENT
507	WASH	6.3	38.5	50.5	11.0	4.5	13290.	5.1	72.8	1.5	5.1	58.2	13425.	1960.	8.0	60.	HVB BIT	LATENT
521	RAW	5.2	39.5	50.3	10.1	5.6	13372.	0.0	0.0	0.0	0.0	57.5	13421.	2172.	6.8	61.	HVB BIT	LATENT
799	RAW	5.2	38.4	50.0	11.7	4.2	13072.	0.0	0.0	0.0	0.0	58.0	13514.	2002.	8.2	61.	HVB BIT	LATENT

COUNTY: 61 HASSELL

556	RAW	3.0	27.4	67.2	5.4	1.1	14623.	4.9	82.9	1.9	4.3	71.6	14889.	2163.	9.0	92.	MV BIT	MARGINAL
558	RAW	3.3	25.3	69.7	5.0	0.5	14800.	4.9	83.9	1.8	3.9	73.8	15032.	2280.	0.0	0.	MV BIT	PREMIUM
563	RAW	3.1	21.3	71.5	7.3	1.0	14352.	4.6	83.4	1.8	2.6	77.9	14914.	2242.	0.0	0.	MV BIT	PREMIUM
880	RAW	4.9	22.8	64.8	12.4	0.8	13483.	4.4	79.2	1.8	4.0	75.0	14576.	2182.	0.0	0.	MV BIT	LATENT
880	WASH	6.6	23.2	71.0	5.8	0.8	14680.	0.0	0.0	0.0	0.0	76.0	14460.	2140.	9.0	0.	MV BIT	PREMIUM

COUNTY: 77 LATIMER

558	RAW	3.4	31.8	58.8	9.4	3.0	13840.	5.1	77.3	1.7	4.1	66.1	14402.	2157.	9.0	86.	HVA BIT	LATENT
562	RAW	3.5	38.2	56.1	5.7	1.3	14082.	0.0	0.0	0.0	0.0	60.0	14269.	2141.	5.1	52.	HVA BIT	MARGINAL
563	RAW	4.0	36.5	55.1	8.4	2.0	13715.	5.4	80.9	2.1	6.6	61.0	14149.	2202.	0.0	0.	HVA BIT	LATENT

COUNTY: 79 LE FLORE

552	RAW	1.9	23.1	67.5	9.4	2.6	14019.	4.5	80.6	1.6	2.2	75.9	14896.	2404.	9.0	111.	MV BIT	LATENT
562	RAW	2.6	18.5	72.5	9.0	0.7	13995.	4.2	81.3	1.7	3.0	80.6	14961.	2300.	6.5	107.	LV BIT	MARGINAL
563	RAW	2.0	17.9	73.7	8.4	1.2	14212.	4.4	85.6	1.8	2.2	81.5	15003.	2273.	9.0	0.	LV BIT	MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 40 OKLAHOMA

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY NATT	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU	AST										
COUNTY: 91 MCINTOSH																									
527	WASH	2.3	34.9	55.8	9.3	4.3	13876.	0.0	0.0	0.0	0.0	0.0	63.0	14414.	2141.	8.0	71.	HVA BIT	LATENT						
COUNTY: 101 MUSKOGEE																									
556	RAW	2.5	29.2	60.4	10.4	4.0	13761.	4.9	80.2	1.8	4.4	69.1	14496.	2177.	0.0	0.	MV BIT	LATENT							
COUNTY: 111 OKMULGEE																									
496	RAW	5.7	37.0	56.7	6.3	2.0	13815.	5.2	77.5	1.9	7.7	61.2	13664.	2061.	3.5	0.	HVB BIT	LATENT							
496	WASH	10.2	35.8	55.2	9.0	2.1	13267.	5.0	75.9	1.8	7.9	61.6	12804.	2127.	2.0	0.	HVC BIT	LATENT							
COUNTY: 121 PITTSBURG																									
558	RAW	3.6	36.1	55.8	8.1	0.8	13584.	5.2	79.5	2.0	7.8	61.3	14199.	2228.	0.0	0.	HVA BIT	MARGINAL							
558	WASH	2.2	36.1	58.9	5.0	0.4	14267.	0.0	0.0	0.0	0.0	62.3	14690.	2245.	0.0	0.	HVA BIT	PREMIUM							
563	RAW	4.2	38.2	52.2	9.5	2.7	13426.	5.3	77.6	1.9	6.1	58.7	13910.	2207.	0.0	0.	HVB BIT	LATENT							
COUNTY: 131 ROGERS																									
001	RAW	5.0	39.4	46.1	14.5	3.8	12490.	0.0	0.0	0.0	0.0	55.4	13414.	1990.	0.0	0.	HVB BIT	LATENT							
473	RAW	4.9	38.4	48.0	13.6	4.6	12538.	4.9	69.5	1.7	6.3	57.2	13240.	1991.	0.0	0.	HVB BIT	LATENT							
473	WASH	4.9	39.2	50.5	10.3	3.9	13227.	5.0	72.5	1.6	5.8	57.5	13556.	1967.	0.0	0.	HVB BIT	LATENT							
490	RAW	5.9	34.8	59.4	5.8	0.9	13920.	0.0	0.0	0.0	0.0	63.6	13806.	0.	0.0	0.	HVB BIT	PREMIUM							
496	RAW	6.5	34.4	59.2	6.4	0.7	13899.	5.2	79.1	1.9	7.4	63.8	13812.	2283.	5.5	63.	HVB BIT	PREMIUM							
COUNTY: 135 SEQUOYAH																									
556	RAW	2.8	21.3	72.2	6.6	0.6	14532.	4.4	80.9	1.7	3.2	77.8	15097.	2092.	9.0	0.	MV BIT	PREMIUM							
COUNTY: 143 TULSA																									
473	RAW	5.4	36.5	50.1	13.4	4.3	12777.	0.0	0.0	0.0	0.0	59.4	13435.	0.	0.0	0.	HVB BIT	LATENT							
496	RAW	4.6	38.1	52.6	9.4	3.1	13365.	4.8	69.1	1.8	7.4	59.1	13702.	2000.	0.0	0.	HVB BIT	LATENT							
COUNTY: 145 WAGONER																									
496	RAW	5.1	34.6	58.3	7.1	0.7	13857.	5.5	82.7	2.0	7.0	63.3	14084.	2176.	0.0	0.	HVA BIT	PREMIUM							

AVERAGE COALBED ANALYSES FOR STATE: 41 OREGON

BED	TYPE ANAL	*****PROXIMATE*****				*****ULTIMATE*****				DRY BTU	DRY SUL	DRY BTU	HYD	DRY CAR	NIT	OXY	DMHF FC	MMMF BTU	AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY MATT	DRY ASH	DRY CARB	DRY NIT	DRY OXY														
COUNTY: 11 COOS																							
799	RAW	18.6	39.0	47.2	13.8	1.0	10857.	4.9	68.2	1.8	17.9	55.7	9959.	2483.	0.0	0.	SUBBIT B						
837	RAW	19.3	41.0	47.2	11.8	0.4	11367.	5.0	68.3	1.6	16.4	54.2	10184.	2182.	0.0	0.	SUBBIT B						

AVERAGE COALBED ANALYSES FOR STATE: 42 PENNSYLVANIA (BITUMINOUS)

*****PROXIMATE*****
NOI DRY DRY DRY DRY
REC VOL FND ASH
MATT CARB*****ULTIMATE*****
DRY DRY DRY DRY
HYD CAR NIT OXYAVER
FSI
HGI
RANK
GRADE

COUNTY: 7 BEAVER

071	RAW	5.0	37.7	53.6	8.7	1.8	13540.	5.1	75.8	1.7	7.5	59.5	13879.	2283.	7.0	52.	HVB BIT	LATENT
076	RAW	3.2	40.8	52.0	7.2	3.1	14000.	5.4	77.1	1.7	5.5	56.9	14239.	2030.	0.0	0.	HVA BIT	LATENT
080	RAW	7.0	35.8	56.4	7.7	1.2	13383.	5.3	79.3	1.6	7.5	61.9	13342.	2469.	5.9	65.	HVB BIT	MARGINAL
084	RAW	4.0	37.3	51.9	10.7	2.7	13384.	0.0	0.0	0.0	0.0	59.3	14085.	2291.	7.3	54.	HVA BIT	LATENT
095	RAW	4.1	36.8	51.5	11.7	2.8	13305.	0.0	0.0	0.0	0.0	59.6	14130.	2265.	0.0	0.	HVA BIT	LATENT
103	RAW	3.6	36.6	48.5	14.9	4.4	12580.	4.9	68.9	1.3	5.6	58.7	13724.	2030.	0.0	0.	HVB BIT	LATENT

COUNTY: 9 BEDFORD

001	RAW	1.2	16.9	65.0	18.1	2.6	12618.	0.0	0.0	0.0	0.0	81.8	15031.	2595.	0.0	0.	LV BIT	LATENT
001	WASH	0.9	17.5	71.0	11.6	1.9	13695.	0.0	0.0	0.0	0.0	81.8	15199.	0.	0.0	0.	LV BIT	LATENT
036	RAW	1.8	15.7	66.2	18.1	2.4	12340.	0.0	0.0	0.0	0.0	83.2	14616.	0.	0.0	0.	LV BIT	LATENT
070	RAW	1.5	18.2	75.9	6.0	0.7	14812.	0.0	0.0	0.0	0.0	81.3	15489.	2620.	0.0	0.	LV BIT	PREMIUM
071	RAW	1.5	16.9	68.5	14.5	2.4	13248.	4.0	73.3	1.3	1.5	82.2	15066.	2613.	8.5	0.	LV BIT	LATENT
071	WASH	2.7	17.6	72.1	10.3	1.7	13955.	0.0	0.0	0.0	0.0	81.7	14988.	2800.	0.0	0.	LV BIT	MARGINAL
084	RAW	1.5	16.6	73.0	10.4	1.5	13969.	4.3	84.4	1.4	2.2	82.7	15261.	2769.	7.7	83.	LV BIT	MARGINAL
087	RAW	1.2	18.8	67.8	13.4	1.8	13480.	0.0	0.0	0.0	0.0	79.9	15262.	2795.	0.0	0.	LV BIT	LATENT
927	RAW	1.5	18.6	69.1	12.4	2.1	13611.	0.0	0.0	0.0	0.0	80.4	15126.	2693.	0.0	0.	LV BIT	LATENT

COUNTY: 13 BLAIR

001	RAW	7.5	27.4	60.8	11.8	1.6	13140.	0.0	0.0	0.0	0.0	70.1	13563.	2537.	8.5	0.	MV BIT	MARGINAL
071	RAW	2.7	29.9	61.2	8.9	2.3	14103.	4.9	81.0	1.5	3.8	68.3	14809.	2293.	0.0	0.	HVA BIT	LATENT
080	RAW	6.2	29.0	62.6	8.5	2.7	14010.	0.0	0.0	0.0	0.0	69.6	14021.	2140.	8.0	82.	MV BIT	LATENT
084	RAW	3.8	26.8	65.1	8.1	0.8	14110.	5.0	81.4	1.5	4.0	71.6	14709.	2910.	6.9	95.	MV BIT	MARGINAL
095	RAW	4.1	28.3	59.9	11.8	3.3	13457.	4.6	76.7	1.2	4.1	69.5	14231.	2305.	8.0	83.	MV BIT	LATENT

COUNTY: 15 BRADFORD

087	RAW	2.1	18.4	69.5	12.1	1.1	13650.	4.2	78.1	1.1	3.4	80.3	15159.	2910.	0.0	0.	LV BIT	LATENT
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AVERAGE COALBED ANALYSES FOR STATES: 42 PENNSYLVANIA (BITUMINOUS)

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****										AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY MATT	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DRY FC	MMMF BTU							
COUNTY: 19 BUTLER																					
001	RAW	4.2	37.3	52.6	10.0	2.7	13335.	0.0	0.0	0.0	0.0	0.0	59.6	13891.	2246.	0.0	0.	HVB BIT	LATENT		
070	RAW	3.2	41.0	50.7	8.3	4.0	13620.	0.0	0.0	0.0	0.0	0.0	56.4	13901.	0.	0.0	0.	HVB BIT	LATENT		
071	RAW	3.5	35.3	53.6	11.1	2.3	13316.	5.1	76.4	1.5	6.2	61.4	14202.	2374.	7.3	57.	HVA BIT	LATENT			
071	WASH	4.1	37.6	53.0	9.4	1.9	13618.	5.1	75.6	1.6	6.6	59.4	14201.	2410.	8.2	52.	HVA BIT	LATENT			
074	RAW	4.0	35.0	55.7	9.3	1.8	13550.	0.0	0.0	0.0	0.0	0.0	62.3	14147.	2382.	6.5	53.	HVA BIT	LATENT		
076	RAW	3.8	35.2	56.9	7.9	2.2	13678.	5.2	79.1	1.5	6.8	62.7	14033.	2440.	8.0	56.	HVA BIT	LATENT			
080	RAW	4.4	37.0	52.8	10.2	3.0	13346.	5.1	74.0	1.4	5.5	59.9	13856.	2285.	6.1	52.	HVB BIT	LATENT			
080	WASH	5.4	39.0	50.8	10.2	2.9	13420.	0.0	0.0	0.0	0.0	0.0	57.7	13793.	2290.	6.0	51.	HVB BIT	LATENT		
084	RAW	4.3	38.0	49.4	12.7	3.6	13031.	0.0	0.0	0.0	0.0	0.0	57.9	13839.	2276.	1.5	55.	HVB BIT	LATENT		
086	RAW	3.9	35.9	55.7	8.5	3.2	13545.	0.0	0.0	0.0	0.0	0.0	61.9	13857.	0.	0.0	0.	HVB BIT	LATENT		
087	RAW	3.8	34.8	48.2	17.0	3.8	12107.	0.0	0.0	0.0	0.0	0.0	59.8	13588.	2505.	4.5	51.	HVB BIT	LATENT		
095	RAW	4.5	36.7	52.0	11.4	2.7	13117.	4.9	71.4	1.3	6.7	59.8	13818.	2344.	5.6	55.	HVB BIT	LATENT			
095	WASH	4.6	39.3	53.1	7.7	2.7	13860.	0.0	0.0	0.0	0.0	0.0	58.3	14003.	2092.	6.5	0.	HVA BIT	LATENT		
883	RAW	4.2	37.6	54.5	8.0	1.7	13730.	0.0	0.0	0.0	0.0	0.0	59.9	14112.	2495.	6.0	52.	HVA BIT	MARGINAL		
887	WASH	4.3	38.4	53.4	8.2	1.5	13730.	0.0	0.0	0.0	0.0	0.0	58.9	14156.	2460.	6.0	47.	HVA BIT	MARGINAL		
927	RAW	11.1	35.6	51.7	12.7	1.4	12330.	0.0	0.0	0.0	0.0	0.0	60.2	12317.	2270.	3.5	0.	HVC BIT	LATENT		
928	RAW	8.4	34.4	52.8	12.8	1.1	12600.	0.0	0.0	0.0	0.0	0.0	61.5	13074.	2680.	1.0	61.	HVB BIT	LATENT		
952	RAW	5.4	32.7	57.3	10.0	1.6	13383.	4.9	76.3	1.4	7.0	64.6	13888.	2667.	7.0	64.	HVB BIT	MARGINAL			
COUNTY: 21 CAMBRIA																					
001	RAW	3.1	24.4	65.2	10.4	1.7	13835.	0.0	0.0	0.0	0.0	0.0	73.9	14800.	2522.	8.5	0.	MV BIT	MARGINAL		
071	RAW	2.6	24.3	66.1	9.5	1.7	14054.	4.6	79.3	1.4	3.1	74.2	14973.	2435.	8.4	93.	MV BIT	MARGINAL			
071	WASH	3.7	18.3	72.6	9.1	1.0	14250.	4.5	83.5	1.5	2.5	80.9	15009.	2736.	9.0	108.	LV BIT	MARGINAL			
074	RAW	2.9	22.9	67.1	10.0	2.1	13955.	4.5	78.0	1.3	3.5	75.9	14837.	2456.	8.5	99.	MV BIT	LATENT			
074	WASH	2.7	22.8	67.6	9.5	2.1	14057.	0.0	0.0	0.0	0.0	0.0	76.0	14910.	2355.	9.0	0.	MV BIT	LATENT		
076	RAW	2.4	17.5	73.0	9.4	1.4	14096.	4.3	80.2	1.4	2.4	81.8	15068.	2610.	8.0	98.	LV BIT	MARGINAL			
076	WASH	3.5	16.2	74.2	9.6	1.4	14060.	4.3	83.2	1.5	2.2	83.3	14878.	2553.	7.4	95.	LV BIT	MARGINAL			
880	RAW	4.5	24.3	62.3	13.4	0.9	13360.	4.5	76.3	1.1	3.9	73.1	14671.	2870.	8.5	84.	MV BIT	LATENT			

AVERAGE COALBED ANALYSES FOR STATE: 42 PENNSYLVANIA (BITUMINOUS)

RED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****					DMF FC	MMF BTU	AST	AVER FSI	AVER HGI	RANK	GRADE	
		MOI REC	DRY VOL H2O	DRY FIXD CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY								
COUNTY: 23 CAMERON																			
095	RAW	5.5	30.9	58.3	10.8	3.5	13650.	0.0	0.0	0.0	66.9	14025.	0.	0.0	0.	0.	HVA BIT	LATENT	
COUNTY: 27 CENTRE																			
001	RAW	3.9	23.9	65.2	11.0	2.2	13655.	0.0	0.0	0.0	74.6	14495.	2447.	0.0	0.	0.	MV BIT	LATENT	
076	RAW	7.2	24.4	66.6	9.0	1.5	13720.	0.0	0.0	0.0	74.2	13802.	2550.	2.5	108.	0.	MV BIT	MARGINAL	
080	RAW	4.9	22.4	66.8	10.8	2.1	13703.	4.6	77.9	1.4	2.5	76.2	14373.	2537.	8.7	99.	0.	MV BIT	LATENT
084	RAW	3.3	22.8	65.2	12.0	2.2	13569.	4.7	79.5	1.3	3.1	75.6	14684.	2533.	8.5	100.	0.	MV BIT	LATENT
087	RAW	3.6	23.3	67.9	8.9	1.7	14102.	0.0	0.0	0.0	75.5	14745.	2605.	8.0	102.	0.	MV BIT	MARGINAL	
095	RAW	3.2	22.8	65.3	11.9	1.9	13564.	0.0	0.0	0.0	75.5	14704.	2708.	6.7	99.	0.	MV BIT	LATENT	
095	WASH	1.9	22.6	65.4	11.8	2.6	13460.	0.0	0.0	0.0	75.7	14709.	2460.	9.0	0.	0.	MV BIT	LATENT	
884	RAW	3.4	23.3	65.2	11.6	3.2	13480.	0.0	0.0	0.0	75.4	14337.	2120.	8.5	105.	0.	MV BIT	LATENT	
928	RAW	6.7	23.3	65.5	11.2	2.0	13540.	4.3	75.0	1.3	5.2	75.1	13981.	2330.	9.0	106.	0.	MV BIT	LATENT
COUNTY: 31 CLARION																			
001	RAW	3.5	37.1	51.5	11.5	3.0	13173.	0.0	0.0	0.0	59.4	14033.	2202.	7.2	0.	0.	HVA BIT	LATENT	
001	WASH	3.4	41.0	50.5	8.6	2.7	13780.	0.0	0.0	0.0	56.1	14256.	2337.	6.9	0.	0.	HVA BIT	LATENT	
071	RAW	4.1	33.9	55.4	10.7	1.6	13402.	5.0	74.5	1.5	6.2	63.0	14232.	2438.	6.8	54.	0.	HVA BIT	MARGINAL
074	RAW	5.9	35.1	54.4	10.5	1.9	13212.	4.8	73.6	1.5	6.2	61.8	13664.	2443.	7.2	57.	0.	HVA BIT	LATENT

AVERAGE COALBED ANALYSES FOR STATE: 42 PENNSYLVANIA (BITUMINOUS)

BED	TYPE	*****PROXIMATE*****						*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FATT	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU	AST						
076	WASH	3.5	36.9	56.3	6.8	6.8	1.1	13957.	0.0	0.0	0.0	0.0	61.0	14338.	2880.	0.0	0.	HVA	BIT	MARGINAL	
084	RAW	3.8	36.7	53.1	10.2	10.2	2.3	13489.	5.1	73.9	1.4	6.6	60.2	14209.	2471.	7.1	56.	HVA	BIT	LATENT	
084	WASH	4.3	40.4	51.3	8.2	8.2	2.6	13675.	0.0	0.0	0.0	0.0	56.8	14168.	2130.	0.0	0.	HVA	BIT	LATENT	
087	RAW	4.1	38.9	49.1	12.0	12.0	4.4	13158.	5.1	73.5	1.3	5.8	57.2	13797.	2190.	6.8	51.	HVB	BIT	LATENT	
087	WASH	4.6	40.1	48.9	11.0	11.0	3.6	13381.	0.0	0.0	0.0	0.0	56.2	13907.	2308.	7.0	50.	HVB	BIT	LATENT	
881	WASH	5.8	39.4	52.4	8.2	8.2	3.2	13890.	0.0	0.0	0.0	0.0	58.1	13865.	2150.	7.0	47.	HVB	BIT	LATENT	
882	RAW	4.2	34.0	56.6	9.4	9.4	1.0	13570.	0.0	0.0	0.0	0.0	63.2	14264.	2810.	6.5	54.	HVA	BIT	MARGINAL	
885	WASH	6.3	38.4	52.8	8.8	8.8	1.9	13430.	0.0	0.0	0.0	0.0	58.7	13571.	2460.	7.5	55.	HVB	BIT	LATENT	
926	RAW	3.7	38.2	52.4	9.4	9.4	3.2	13660.	0.0	0.0	0.0	0.0	58.9	14144.	2220.	0.0	0.	HVA	BIT	LATENT	
927	RAW	5.2	37.1	51.3	11.6	11.6	2.6	13210.	0.0	0.0	0.0	0.0	59.2	13858.	2360.	0.0	0.	HVB	BIT	LATENT	
COUNTY: 33 CLEARFIELD																					
001	RAW	4.3	24.2	64.8	11.0	11.0	1.8	13596.	0.0	0.0	0.0	0.0	74.0	14438.	2501.	7.7	96.	MV	BIT	MARGINAL	
001	WASH	2.4	24.5	65.9	9.5	9.5	1.4	13977.	0.0	0.0	0.0	0.0	73.9	14965.	2633.	8.8	0.	MV	BIT	MARGINAL	
071	RAW	3.5	24.6	64.5	10.9	10.9	1.5	13763.	4.6	77.9	1.4	4.1	73.5	14761.	2545.	8.2	89.	MV	BIT	MARGINAL	
071	WASH	3.6	24.8	65.9	9.4	9.4	1.0	14137.	0.0	0.0	0.0	0.0	73.5	14969.	2817.	8.8	90.	MV	BIT	MARGINAL	
074	RAW	3.1	25.2	65.5	9.3	9.3	1.5	14037.	4.7	79.8	1.4	3.4	73.2	14856.	2595.	8.1	91.	MV	BIT	MARGINAL	
074	WASH	4.1	23.8	64.7	11.5	11.5	1.7	13670.	0.0	0.0	0.0	0.0	74.4	14651.	2760.	8.2	89.	MV	BIT	MARGINAL	
076	RAW	3.6	23.4	65.9	10.7	10.7	1.6	13914.	4.6	78.8	1.5	4.3	75.0	14865.	2545.	7.1	98.	MV	BIT	MARGINAL	
076	WASH	3.2	24.9	65.6	9.5	9.5	1.1	14060.	0.0	0.0	0.0	0.0	73.4	14946.	2910.	8.5	88.	MV	BIT	MARGINAL	
080	RAW	3.7	22.7	66.0	11.3	11.3	2.3	13691.	4.5	75.8	1.3	2.7	75.9	14606.	2474.	7.6	100.	MV	BIT	LATENT	
084	RAW	3.2	24.8	64.3	10.8	10.8	2.5	13724.	4.6	78.0	1.3	3.7	73.6	14624.	2494.	8.3	95.	MV	BIT	LATENT	
084	WASH	3.9	28.2	62.2	9.5	9.5	2.3	13967.	4.9	76.8	1.4	3.3	70.0	14567.	2373.	8.1	80.	MV	BIT	LATENT	
095	RAW	2.5	23.9	62.6	13.4	13.4	2.8	13251.	0.0	0.0	0.0	0.0	74.1	14641.	2469.	0.0	0.	MV	BIT	LATENT	
860	RAW	5.5	22.8	65.6	11.6	11.6	2.5	13720.	0.0	0.0	0.0	0.0	75.8	14361.	2370.	0.0	0.	MV	BIT	LATENT	
882	RAW	3.6	26.3	60.0	13.7	13.7	2.6	13330.	0.0	0.0	0.0	0.0	71.2	14607.	2180.	8.5	88.	MV	BIT	LATENT	
884	RAW	7.1	20.2	71.2	8.6	8.6	1.4	14280.	0.0	0.0	0.0	0.0	78.9	14335.	2780.	9.0	101.	LV	BIT	MARGINAL	
887	RAW	5.1	21.8	66.6	11.6	11.6	2.2	13610.	0.0	0.0	0.0	0.0	76.8	14353.	2780.	7.5	0.	MV	BIT	LATENT	
924	RAW	3.3	23.1	67.1	9.8	9.8	1.0	14050.	0.0	0.0	0.0	0.0	75.3	14993.	2670.	9.0	95.	MV	BIT	MARGINAL	
926	RAW	3.5	26.7	65.4	8.0	8.0	1.5	14265.	0.0	0.0	0.0	0.0	71.9	14810.	2380.	8.2	86.	MV	BIT	MARGINAL	

AVERAGE LABELED ANALYSES FOR STATES 42 PENNSYLVANIA (ILLUSTRIOUS)

*****PROXIMATE*****
MOI DRY DRY DRY DRY
REC VOL FIXD ASH
MATT CARB

*****ULTIMATE*****
DRY DRY DRY DRY
HYD CAR NIT OXY

GRADE

RANK

AVER
HGI

ASST
FSI

MMMF
BTU

DMMF
FC

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

MARGINAL

MV BIT

0.0

0.0

2850.

14904.

74.2

0.0

0.0

0.0

0.0

0.0

14057.

1.1

9.4

66.4

24.2

3.4

WASH

926

928

928

LATENT

MV BIT

101.

8.1

2477.

14616.

76.2

0.0

0.0

0.0

0.0

14330.

2.6

14.6

63.5

21.9

3.0

RAK

928

928

LATENT

LV BIT

0.0

9.0

2570.

14796.

78.2

0.0

0.0

0.0

0.0

14330.

2.1

8.4

70.5

21.1

3.9

WASH

952

952

MARGINAL

MV BIT

91.

8.1

2730.

14752.

74.4

3.3

1.4

81.3

4.7

14043.

1.0

9.1

66.8

24.1

4.0

RAW

952

952

COUNTY: 35 CLINTON

LATENT

MV BIT

112.

9.0

2400.

14831.

74.1

0.0

0.0

0.0

0.0

14460.

2.1

7.7

67.4

24.9

3.6

RAK

074

074

LATENT

MV BIT

104.

8.5

2210.

14448.

74.2

0.0

0.0

0.0

0.0

14100.

2.4

9.3

66.1

24.6

5.2

RAW

076

076

LATENT

MV BIT

121.

6.5

2130.

13755.

74.7

4.4

1.2

75.5

4.4

13483.

2.9

10.9

65.1

23.9

6.7

RAW

080

084

LATENT

MV BIT

109.

8.3

2370.

13543.

76.5

2.3

1.2

76.5

4.4

13427.

2.9

10.6

66.9

22.5

7.4

RAW

084

084

LATENT

MV BIT

0.0

0.0

2390.

14078.

77.6

0.0

0.0

0.0

0.0

14250.

1.9

6.9

71.3

21.8

6.5

WASH

084

084

LATENT

MV BIT

100.

9.0

2470.

14597.

76.3

0.0

0.0

0.0

0.0

13800.

2.4

11.0

66.6

22.4

4.1

RAW

928

928

MARGINAL

HVA BIT

0.

6.4

2388.

14299.

64.6

0.0

0.0

0.0

0.0

13723.

1.8

9.0

58.0

33.0

3.9

RAK

001

074

MARGINAL

MV BIT

0.

0.0

0.

13858.

70.1

0.0

0.0

0.0

0.0

13560.

1.2

8.6

63.3

28.1

5.7

RAW

074

080

LATENT

HVA BIT

84.

8.0

2460.

14576.

65.3

3.0

1.7

77.8

5.1

14036.

2.4

8.4

58.9

32.7

3.1

RAW

080

084

LATENT

HVA BIT

0.

8.2

2394.

14435.

64.6

0.0

0.0

0.0

0.0

13711.

2.7

10.5

56.7

32.8

3.7

RAW

AVERAGE COALBED ANALYSES FOR STATE: 42 PENNSYLVANIA (BITUMINOUS)

*****PROXIMATE*****
 MOI DRY DRY DRY
 REC VOL FIXD ASH
 MATT CARB

*****ULTIMATE*****
 DRY DRY DRY
 HYD CAR NIT OXY

TYPE ANAL
 AVER HGI
 RANK
 GRADE

AST
 FSI

MMMF
 BTU

FC

FC

FC

FC

FC

FC

FC

FC

FC

FC

FC

FC

FC

FC

FC

COUNTY: 59 GREENE

084 WASH 2.2 25.7 61.9 12.4

3.1 13524. 4.7 78.3 1.4 5.1 72.4 14765. 2408. 8.2 88. MV BIT LATENT

884 RAW 7.1 20.2 71.2 8.6

1.4 14280. 0.0 0.0 0.0 0.0 78.9 14335. 2780. 9.0 101. LV BIT MARGINAL

921 RAW 3.4 32.6 50.5 16.9

2.2 12460. 4.6 69.4 1.4 5.5 62.3 14281. 2460. 8.0 61. HVA BIT LATENT

937 RAW 4.0 33.6 53.8 12.6

1.8 13150. 0.0 0.0 0.0 0.0 62.7 14266. 2610. 8.5 65. HVA BIT LATENT

023 RAW 3.4 34.9 50.0 15.1

2.7 12654. 5.0 69.6 1.5 5.6 60.3 14112. 2603. 7.2 0. HVA BIT LATENT

029 RAW 2.8 34.5 53.6 11.9

1.9 13303. 5.0 74.3 1.6 5.8 61.9 14508. 2542. 7.9 60. HVA BIT LATENT

036 RAW 2.5 35.8 54.4 9.8

2.5 13709. 5.1 77.2 1.6 5.4 61.3 14556. 2225. 8.0 64. HVA BIT LATENT

949 RAW 2.6 35.0 54.7 10.3

2.4 13612. 4.9 74.6 1.3 4.9 62.1 14520. 2297. 0.0 0. HVA BIT LATENT

COUNTY: 61 HUNTINGDON

001 WASH 1.4 16.3 74.3 9.4

1.4 14073. 0.0 0.0 0.0 0.0 83.2 15212. 2780. 0.0 0. LV BIT MARGINAL

071 RAW 2.0 18.3 70.1 11.6

1.6 13740. 0.0 0.0 0.0 0.0 80.7 15112. 0. 0.0 0. LV BIT MARGINAL

087 RAW 1.3 19.1 70.5 10.4

1.4 13840. 0.0 0.0 0.0 0.0 79.9 15156. 0. 0.0 0. LV BIT MARGINAL

885 RAW 2.9 17.5 71.7 10.7

1.9 13902. 0.0 0.0 0.0 0.0 81.8 14936. 2680. 7.0 0. LV BIT LATENT

885 WASH 4.4 15.3 76.0 8.7

1.5 14243. 0.0 0.0 0.0 0.0 84.4 14747. 2800. 0.0 0. LV BIT MARGINAL

COUNTY: 63 INDIANA

001 RAW 4.1 28.1 60.5 11.4

1.6 13461. 0.0 0.0 0.0 0.0 69.4 14407. 2504. 6.4 0. MV BIT MARGINAL

001 WASH 1.3 28.8 59.5 11.7

1.3 13550. 0.0 0.0 0.0 0.0 68.4 15085. 0. 0.0 0. HVA BIT MARGINAL

036 RAW 3.3 32.5 54.0 13.6

1.5 13019. 4.7 72.2 1.5 6.0 63.6 14454. 2725. 7.7 62. HVA BIT LATENT

071 RAW 2.6 28.5 61.2 10.3

2.0 13829. 4.7 75.3 1.4 3.7 69.4 14834. 2475. 7.7 78. MV BIT LATENT

071 WASH 2.4 28.7 61.6 9.7

1.6 13966. 4.9 81.0 1.5 3.4 69.2 14951. 2626. 8.5 88. MV BIT MARGINAL

074 RAW 3.1 26.4 62.7 10.9

1.8 13759. 4.7 76.9 1.3 3.7 71.6 14780. 2564. 8.1 86. MV BIT MARGINAL

074 WASH 3.5 25.7 65.5 8.8

1.2 14145. 4.7 78.4 1.5 3.3 72.7 14860. 2773. 8.6 89. MV BIT MARGINAL

076 RAW 4.1 27.6 61.5 10.9

1.7 13699. 0.0 0.0 0.0 0.0 70.2 14560. 2880. 8.0 77. MV BIT MARGINAL

084 RAW 2.5 24.5 64.7 10.7

3.1 13835. 4.6 75.3 1.2 2.3 74.1 14762. 2373. 8.3 95. MV BIT LATENT

084 WASH 3.0 26.1 65.1 8.9

1.9 14201. 4.7 79.8 1.3 3.3 72.5 14904. 2543. 8.5 95. MV BIT LATENT

880 RAW 4.6 27.9 60.4 11.7

2.1 13400. 0.0 0.0 0.0 0.0 69.7 14244. 2580. 0.0 0. MV BIT LATENT

882 RAW 3.9 28.2 60.9 10.9

2.0 13700. 0.0 0.0 0.0 0.0 69.6 14563. 2420. 8.5 76. MV BIT LATENT

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL MAT	DRY FIXD CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMHF FC	MMMF BTU	AST											
COUNTY: 65 JEFFERSON																									
926	RAW	3.8	28.1	61.8	10.1	2.7	13824.	0.0	0.0	0.0	0.0	70.0	14887.	2247.	8.0	91.	MV BIT	LATENT							
926	WASH	3.7	24.2	66.0	9.7	1.2	14007.	4.7	80.5	1.4	2.8	74.1	14839.	2773.	9.0	97.	MV BIT	MARGINAL							
927	RAW	3.2	28.5	60.6	10.9	1.5	13740.	0.0	0.0	0.0	0.0	69.1	14796.	2610.	8.0	87.	MV BIT	MARGINAL							
927	WASH	2.3	22.8	66.9	10.3	2.2	13960.	0.0	0.0	0.0	0.0	75.9	14983.	2480.	9.0	0.	MV BIT	LATENT							
952	RAW	2.5	29.9	60.1	10.0	1.5	13880.	4.9	80.0	1.5	4.8	67.7	14940.	2632.	7.5	76.	HVA BIT	MARGINAL							
952	WASH	3.3	30.3	59.6	10.1	1.4	13728.	5.1	80.8	1.5	4.2	67.2	14637.	2730.	9.0	75.	HVA BIT	MARGINAL							
COUNTY: 65 JEFFERSON																									
001	RAW	4.2	32.3	57.0	10.7	1.6	13388.	0.0	0.0	0.0	0.0	64.8	14193.	2433.	5.9	0.	HVA BIT	MARGINAL							
001	WASH	3.1	34.5	56.9	8.6	2.0	13844.	0.0	0.0	0.0	0.0	63.1	14468.	2225.	0.0	0.	HVA BIT	LATENT							
071	RAW	5.3	30.8	58.0	11.2	1.5	13306.	4.8	72.5	1.4	6.5	66.4	14036.	2565.	7.6	68.	HVA BIT	MARGINAL							
071	WASH	4.1	32.5	59.1	8.4	1.0	14010.	0.0	0.0	0.0	0.0	65.3	14584.	2707.	8.0	0.	HVA BIT	MARGINAL							
074	RAW	3.1	31.8	58.9	9.3	1.9	13853.	5.0	76.8	1.4	4.9	65.9	14608.	2498.	7.4	69.	HVA BIT	LATENT							
076	RAW	3.1	28.2	63.6	8.2	0.9	14110.	0.0	0.0	0.0	0.0	70.0	14831.	2890.	8.0	76.	MV BIT	MARGINAL							
080	RAW	4.6	32.9	61.5	5.7	0.6	14340.	0.0	0.0	0.0	0.0	65.6	14448.	2670.	5.7	59.	HVA BIT	PREMIUM							
084	RAW	3.3	32.9	57.0	10.1	1.4	13675.	5.1	77.4	1.5	6.0	64.3	14593.	2706.	7.5	67.	HVA BIT	MARGINAL							
084	WASH	4.6	38.1	52.9	9.0	2.7	13826.	5.1	76.9	1.4	4.3	59.1	14163.	2288.	7.3	73.	HVA BIT	LATENT							
926	RAW	5.1	33.1	58.6	8.3	2.1	13900.	0.0	0.0	0.0	0.0	64.8	14139.	2340.	0.0	0.	HVA BIT	LATENT							
926	WASH	2.6	34.6	55.1	10.3	2.8	13750.	0.0	0.0	0.0	0.0	62.6	14621.	2130.	8.0	0.	HVA BIT	LATENT							
COUNTY: 73 LAWRENCE																									
080	RAW	4.6	37.7	50.9	11.4	3.7	13036.	0.0	0.0	0.0	0.0	58.7	13589.	2096.	5.6	53.	HVB BIT	LATENT							
080	WASH	4.2	40.0	56.1	4.0	1.8	14305.	0.0	0.0	0.0	0.0	58.9	14074.	2195.	6.5	55.	HVA BIT	MARGINAL							
084	RAW	4.5	37.1	50.9	12.0	2.5	12987.	0.0	0.0	0.0	0.0	59.0	13809.	2363.	6.1	52.	HVB BIT	LATENT							
084	WASH	4.0	38.8	54.0	7.2	1.6	13805.	0.0	0.0	0.0	0.0	58.9	14118.	2700.	7.5	55.	HVA BIT	MARGINAL							
095	RAW	5.3	38.1	51.2	10.7	2.8	13146.	0.0	0.0	0.0	0.0	58.4	13597.	2204.	5.1	49.	HVB BIT	LATENT							
COUNTY: 83 MCKEAN																									
103	RAW	5.7	33.0	52.5	14.5	3.2	12703.	0.0	0.0	0.0	0.0	63.0	13617.	2420.	1.0	58.	HVB BIT	LATENT							
COUNTY: 85 MERCER																									
001	RAW	6.4	35.8	53.6	10.6	1.9	13130.	0.0	0.0	0.0	0.0	60.9	13517.	2290.	0.0	0.	HVB BIT	LATENT							
080	RAW	4.7	37.2	53.2	9.6	1.6	13360.	0.0	0.0	0.0	0.0	59.7	13914.	2630.	5.0	52.	HVB BIT	MARGINAL							
084	RAW	5.4	37.0	50.9	12.1	2.2	13003.	0.0	0.0	0.0	0.0	59.0	13727.	2592.	6.0	50.	HVB BIT	LATENT							

AVERAGE COALBED ANALYSES FOR STATE: 42 PENNSYLVANIA (BITUMINOUS)

84

BED	TYPE	*****PROXIMATE*****					*****ULTIMATE*****					AVER FSI	AVER HGI	RANK	GRADE			
		NOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY					DMMF FC	MMMF BTU	AST
COUNTY: 111 SOMERSET																		
095	RAW	5.1	39.8	50.5	9.6	3.8	13314.	5.2	76.0	1.4	7.4	57.1	13524.	2197.	4.8	49.	HVB BIT	LATENT
095	WASH	4.8	40.5	51.7	7.8	3.5	13610.	0.0	0.0	0.0	0.0	57.1	13631.	2123.	0.0	0.	HVB BIT	LATENT
001	RAW	5.2	19.0	69.8	11.3	1.7	13671.	0.0	0.0	0.0	0.0	80.0	14743.	2619.	5.5	98.	LV BIT	MARGINAL
001	WASH	2.8	17.4	72.3	10.4	1.4	13886.	0.0	0.0	0.0	0.0	81.8	14934.	2664.	7.0	0.	LV BIT	MARGINAL
029	RAW	2.8	21.5	67.6	11.0	1.4	13807.	4.4	77.8	1.7	3.0	77.1	14969.	2749.	8.8	92.	MV BIT	MARGINAL
029	WASH	2.6	21.7	69.6	8.8	0.9	14235.	0.0	0.0	0.0	0.0	77.1	15142.	2910.	0.0	0.	MV BIT	MARGINAL
033	RAW	4.6	20.4	62.3	17.4	2.0	12275.	3.9	70.7	1.6	4.4	77.3	15957.	2560.	0.0	88.	MV BIT	LATENT
036	RAW	3.9	20.9	66.1	13.0	1.6	13400.	4.3	75.3	1.6	2.6	77.5	14647.	2619.	7.9	91.	MV BIT	LATENT
038	RAW	3.8	20.9	69.2	9.9	0.8	14007.	0.0	0.0	0.0	0.0	77.7	14901.	2877.	8.8	93.	MV BIT	MARGINAL
067	RAW	4.0	19.4	70.3	10.3	2.4	13820.	4.0	76.7	1.4	3.6	79.9	14514.	2294.	6.6	105.	LV BIT	LATENT
071	RAW	2.7	18.4	69.6	12.0	1.7	13652.	4.3	78.6	1.4	2.7	80.5	14952.	2646.	8.1	97.	LV BIT	MARGINAL
071	WASH	6.9	20.5	67.2	12.3	1.9	13417.	4.3	76.7	1.4	3.4	78.1	13999.	2507.	6.5	101.	LV BIT	LATENT
074	RAW	2.9	17.9	72.3	9.9	1.6	14031.	4.3	80.3	1.3	2.6	81.4	14980.	2607.	8.8	102.	LV BIT	MARGINAL
076	RAW	2.5	17.2	71.6	11.2	2.1	13781.	4.2	78.6	1.3	2.1	82.2	14940.	2527.	7.6	98.	LV BIT	LATENT
076	WASH	2.6	17.4	71.7	10.9	1.4	13836.	4.3	80.8	1.5	2.7	81.7	15013.	2766.	9.0	94.	LV BIT	MARGINAL
080	RAW	3.4	17.5	68.1	14.4	2.0	13200.	4.2	76.6	1.2	1.9	81.4	14713.	2662.	3.5	93.	LV BIT	LATENT
080	WASH	3.4	17.7	70.9	11.4	1.8	13750.	0.0	0.0	0.0	0.0	81.5	14816.	2560.	9.0	102.	LV BIT	MARGINAL
084	RAW	2.8	17.5	71.8	10.7	1.9	13861.	4.2	79.0	1.3	2.2	81.8	14900.	2580.	8.1	105.	LV BIT	LATENT
084	WASH	3.0	17.7	73.2	9.1	1.1	14129.	0.0	0.0	0.0	0.0	81.5	15006.	2742.	7.2	105.	LV BIT	MARGINAL
087	RAW	3.4	19.1	70.1	10.8	1.6	13810.	0.0	0.0	0.0	0.0	79.9	14806.	0.	0.0	0.	LV BIT	MARGINAL
095	RAW	3.5	17.8	71.6	10.6	1.9	13807.	4.1	79.2	1.3	2.6	81.5	14714.	2830.	6.0	95.	LV BIT	LATENT
880	RAW	2.6	17.5	70.1	12.4	2.0	13624.	4.3	77.1	1.3	1.8	81.6	14970.	2535.	9.0	98.	LV BIT	LATENT
880	WASH	2.5	18.1	71.3	10.6	1.4	13915.	0.0	0.0	0.0	0.0	81.0	15059.	2637.	8.5	0.	LV BIT	MARGINAL
924	WASH	4.0	17.1	74.6	8.4	0.9	14280.	0.0	0.0	0.0	0.0	82.2	14883.	2900.	9.0	0.	LV BIT	MARGINAL
926	RAW	4.0	20.3	70.8	8.9	2.4	14000.	0.0	0.0	0.0	0.0	79.1	14477.	2460.	8.5	106.	LV BIT	LATENT
927	RAW	3.4	18.7	71.8	9.6	1.3	14070.	0.0	0.0	0.0	0.0	80.4	14920.	2805.	9.0	100.	LV BIT	MARGINAL
928	RAW	2.3	16.1	73.0	10.9	1.7	13870.	4.2	79.8	1.3	2.1	83.3	15063.	2680.	0.0	0.	LV BIT	MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 46 SOUTH DAKOTA

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****					AST	AVER FSI	AVER HGI	RANK	GRADE	
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY						DMMP FC
COUNTY: 31 CORSON																	
799	RAW	35.9	39.8	48.5	11.7	1.0	10886.	4.3	66.0	1.2	18.4	55.7	7529.	2084.	0.0	40.	LIGNIT A
COUNTY: 41 DEWEY																	
799	RAW	35.7	41.4	46.8	11.8	0.8	10856.	4.4	65.7	1.3	18.6	53.7	7550.	2139.	0.0	41.	LIGNIT A
COUNTY: 105 PERKINS																	
799	RAW	30.5	40.7	41.3	18.1	2.2	10410.	4.2	62.7	0.8	14.4	51.6	8201.	2125.	0.0	59.	LIGNIT A

AVERAGE COALBED ANALYSES FOR STATE: 47 TENNESSEE

BED	TYPE	*****PROXIMATE*****										*****ULTIMATE*****										AS1	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU													
COUNTY: 1 ANDERSON																										
126	RAW	2.9	38.3	56.1	5.6	0.7	14116.	5.4	80.9	1.7	7.6	59.9	14461.	2527.	3.5	44.	HVA BIT	PREMIUM								
128	RAW	4.2	36.4	50.6	13.0	1.3	12720.	4.6	69.0	1.5	7.2	59.2	13904.	2702.	3.0	43.	HVB BIT	LATENT								
134	RAW	2.0	37.3	51.8	10.9	3.3	13286.	4.8	71.8	1.6	5.6	59.3	14259.	2252.	5.5	48.	HVA BIT	LATENT								
135	RAW	2.5	38.3	54.2	7.5	0.9	13841.	5.1	76.4	1.9	6.5	59.2	14522.	2541.	4.6	45.	HVA BIT	PREMIUM								
144	RAW	6.4	37.2	53.2	9.7	0.7	13155.	0.0	0.0	0.0	0.0	59.5	13557.	2532.	2.0	41.	HVB BIT	MARGINAL								
151	RAW	3.0	36.1	54.8	9.1	2.5	13527.	5.0	75.5	1.8	6.2	61.3	14173.	2392.	0.0	0.	HVA BIT	LATENT								
157	RAW	4.0	40.0	57.0	3.0	0.9	14720.	0.0	0.0	0.0	0.0	59.1	14469.	2320.	0.0	0.	HVA BIT	PREMIUM								
168	RAW	1.9	37.0	55.6	7.4	1.8	14059.	5.3	78.8	1.9	5.5	60.8	14717.	2322.	0.0	0.	HVA BIT	MARGINAL								
212	RAW	2.1	40.3	55.7	4.1	1.7	14605.	5.5	81.1	2.2	5.3	58.6	14711.	2125.	0.0	0.	HVA BIT	MARGINAL								
911	RAW	2.2	36.4	50.6	13.0	1.8	13030.	0.0	0.0	0.0	0.0	59.2	14507.	2690.	4.5	46.	HVA BIT	LATENT								
COUNTY: 7 BLEDSOE																										
265	RAW	2.2	34.2	54.9	10.9	2.6	13505.	0.0	0.0	0.0	0.0	62.8	14561.	2380.	7.0	54.	HVA BIT	LATENT								
286	RAW	3.7	29.9	53.7	16.5	1.3	12582.	4.7	76.6	1.5	5.1	65.6	14432.	2535.	5.0	56.	HVA BIT	LATENT								
COUNTY: 13 CAMPBELL																										
001	RAW	6.0	37.8	52.3	9.9	1.5	13203.	0.0	0.0	0.0	0.0	58.8	13593.	2377.	3.7	46.	HVB BIT	MARGINAL								
112	RAW	3.8	36.6	49.6	13.8	2.2	12753.	4.9	71.1	1.5	6.5	58.7	13998.	2507.	3.0	42.	HVB BIT	LATENT								
126	RAW	3.6	38.8	55.5	5.7	0.7	14055.	5.4	81.1	1.7	7.8	59.3	14318.	2404.	4.0	42.	HVA BIT	PREMIUM								
126	WASH	5.4	40.1	55.4	4.5	0.7	14285.	0.0	0.0	0.0	0.0	58.3	14075.	2525.	0.0	40.	HVA BIT	PREMIUM								
129	RAW	3.3	39.2	54.3	6.5	1.1	13907.	5.4	79.1	1.9	7.6	58.6	14285.	2586.	4.5	46.	HVA BIT	MARGINAL								
134	RAW	3.1	36.4	50.3	13.3	3.0	12827.	4.9	72.2	1.5	5.9	59.4	14009.	2375.	5.5	45.	HVA BIT	LATENT								
135	RAW	2.9	37.3	51.1	11.6	1.9	13070.	4.8	71.9	1.8	8.0	58.8	14180.	2590.	5.0	45.	HVA BIT	LATENT								
140	RAW	5.4	37.3	53.3	9.4	1.9	13295.	5.1	75.9	1.9	6.7	59.8	13664.	2370.	1.0	48.	HVB BIT	LATENT								
144	RAW	4.7	37.7	56.4	5.9	1.0	13844.	5.2	78.2	1.9	7.2	60.5	13921.	2513.	3.3	47.	HVB BIT	PREMIUM								
147	RAW	3.2	39.1	55.3	5.6	4.3	14040.	5.3	77.1	1.8	5.9	59.7	13877.	2340.	0.0	0.	HVB BIT	LATENT								
151	RAW	3.6	38.5	56.3	5.2	1.1	14176.	5.3	79.3	1.9	7.4	59.8	14298.	2463.	4.5	50.	HVA BIT	MARGINAL								

AVERAGE COALBED ANALYSES FOR STATE: 47 TENNESSEE

BED	TYPE	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY HATT	DRY FIXD	DRY CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DRMF FC	NMDF BTU	AST									
151	WASH	5.4	38.8	56.0	5.2	1.3	14221.	0.0	0.0	0.0	0.0	0.0	59.5	14042.	2611.	5.2	0.	HVA	BIT	MARGINAL					
157	RAW	4.4	40.3	57.2	2.5	1.1	14447.	5.6	81.0	2.1	7.9	59.0	14030.	2140.	0.0	0.	0.	HVA	BIT	MARGINAL					
168	RAW	3.0	36.6	55.9	7.5	1.0	13895.	5.3	80.6	1.9	6.7	61.0	14494.	2371.	5.2	47.	HVA	BIT	PREMIUM						
212	RAW	3.7	40.3	53.9	5.9	2.5	13992.	5.2	78.8	1.9	7.2	57.9	14029.	2176.	5.5	44.	HVA	BIT	LATENT						
256	RAW	3.0	37.0	55.3	7.6	1.1	13764.	5.5	82.0	2.1	7.4	60.5	14361.	2410.	0.0	0.	HVA	BIT	MARGINAL						
878	RAW	3.0	39.2	55.9	4.9	1.3	14319.	0.0	0.0	0.0	0.0	59.3	14464.	2476.	5.0	46.	HVA	BIT	MARGINAL						
878	WASH	5.6	39.1	55.5	5.5	1.4	14220.	0.0	0.0	0.0	0.0	59.2	14057.	2635.	3.5	0.	HVA	BIT	MARGINAL						
918	RAW	6.0	35.5	52.6	11.9	0.8	12810.	0.0	0.0	0.0	0.0	60.5	13589.	2790.	2.0	46.	HVB	BIT	MARGINAL						
COUNTY: 25 CLATBORNE																									
001	RAW	3.8	37.1	54.6	8.3	1.3	13592.	0.0	0.0	0.0	0.0	60.2	14136.	2586.	5.5	0.	HVA	BIT	MARGINAL						
126	RAW	5.4	38.6	55.3	6.1	0.7	14007.	5.2	75.5	1.7	9.3	59.4	14039.	2623.	4.0	51.	HVA	BIT	PREMIUM						
134	RAW	3.4	36.6	54.1	9.3	1.1	13515.	5.2	77.8	2.1	6.5	60.3	14301.	2738.	4.5	44.	HVA	BIT	MARGINAL						
135	RAW	3.8	38.5	53.7	7.7	1.5	13676.	5.4	76.4	1.9	6.4	58.9	14110.	2660.	4.2	46.	HVA	BIT	MARGINAL						
142	RAW	5.6	34.6	56.5	8.9	1.1	13493.	4.7	76.8	2.0	7.4	62.7	13869.	2477.	0.0	0.	HVB	BIT	MARGINAL						
151	RAW	3.3	37.9	56.2	5.9	1.1	14112.	5.3	80.1	2.0	6.9	60.2	14389.	2402.	4.7	49.	HVA	BIT	MARGINAL						
151	WASH	5.4	38.6	57.2	4.2	0.8	14311.	0.0	0.0	0.0	0.0	60.1	14037.	2326.	1.0	54.	HVA	BIT	PREMIUM						
157	RAW	4.9	39.6	54.8	5.5	2.1	13990.	0.0	0.0	0.0	0.0	58.7	13848.	2197.	1.0	54.	HVB	BIT	LATENT						
157	WASH	3.8	39.3	53.6	7.1	1.2	13920.	5.6	81.8	2.2	7.1	58.3	14287.	2783.	5.9	48.	HVA	BIT	MARGINAL						
COUNTY: 35 CUMBERLAND																									
286	RAW	2.2	28.6	59.0	12.5	1.8	13258.	4.5	75.4	1.4	4.8	68.6	14673.	2490.	0.0	0.	HVA	BIT	LATENT						
326	RAW	2.8	32.7	60.5	6.8	0.7	14340.	4.9	81.1	1.4	5.1	65.5	14913.	2640.	0.0	0.	HVA	BIT	PREMIUM						
799	RAW	2.0	31.4	61.3	7.3	1.1	14270.	0.0	0.0	0.0	0.0	66.9	15009.	2400.	0.0	0.	HVA	BIT	MARGINAL						
COUNTY: 49 FENTRESS																									
312	RAW	2.6	37.0	52.7	10.3	2.8	13441.	5.1	74.6	1.4	6.0	59.8	14285.	2236.	0.0	0.	HVA	BIT	LATENT						
346	RAW	6.4	35.8	58.2	6.1	0.9	13945.	4.9	80.1	1.3	7.7	62.4	13804.	2430.	0.0	0.	HVB	BIT	PREMIUM						

AVERAGE COALBED ANALYSES FOR STATE: 47 TENNESSEE

*****PROXIMATE*****
 MOI DRY DRY DRY DRY
 REC VOL FIXD ASH
 MATT CARB

*****ULTIMATE*****
 DRY DRY DRY DRY
 CAR NIT OXY FC

AST MMTF BTU
 FSI AVER HGI
 RANK GRADE

COUNTY: 61 GRUNDY

286	RAW	2.6	29.8	59.9	10.3	0.9	13576.	4.7	78.1	1.5	5.5	67.6	14696.	2588.	6.1	64.	HVA BIT	MARGINAL
286	WASH	6.1	29.7	60.4	9.9	0.7	13669.	0.0	0.0	0.0	0.0	67.8	14165.	2629.	0.0	0.	HVA BIT	MARGINAL

COUNTY: 65 HAMILTON

270	RAW	2.9	30.5	57.6	11.9	3.6	13472.	0.0	0.0	0.0	0.0	66.9	14432.	2358.	0.0	0.	HVA BIT	LATENT
286	RAW	2.5	28.5	58.7	12.8	2.7	13381.	4.7	76.1	1.4	3.3	68.8	14678.	2293.	0.0	0.	HVA BIT	LATENT
295	RAW	2.8	29.3	60.4	10.3	1.6	13774.	5.0	79.7	1.5	3.8	68.4	14773.	2518.	0.0	0.	HVA BIT	MARGINAL
326	RAW	2.5	40.0	54.5	5.5	1.3	14820.	0.0	0.0	0.0	0.0	58.2	15158.	2200.	0.0	0.	HVA BIT	MARGINAL
799	RAW	3.5	29.0	60.9	10.1	1.6	13885.	0.0	0.0	0.0	0.0	68.8	14766.	2360.	0.0	0.	HVA BIT	MARGINAL

COUNTY: 115 MARION

129	RAW	2.7	24.2	53.5	22.3	3.8	11790.	0.0	0.0	0.0	0.0	71.7	14360.	2170.	0.0	0.	MV BIT	LATENT
286	RAW	2.5	29.3	60.6	10.2	1.2	13643.	4.7	77.0	1.5	5.3	68.4	14730.	2545.	7.0	59.	HVA BIT	MARGINAL
286	WASH	4.6	29.4	62.0	8.6	0.7	13924.	0.0	0.0	0.0	0.0	68.5	14476.	2764.	0.0	0.	HVA BIT	MARGINAL
295	RAW	3.0	28.4	64.9	6.7	1.3	14460.	0.0	0.0	0.0	0.0	70.3	14919.	2540.	7.5	80.	MV BIT	MARGINAL
320	RAW	3.2	25.1	63.7	11.2	2.8	13690.	4.5	77.7	1.2	2.8	73.3	14601.	2255.	0.0	0.	MV BIT	LATENT
326	RAW	3.6	33.3	57.6	9.2	2.2	13797.	0.0	0.0	0.0	0.0	64.4	14417.	2319.	0.0	0.	HVA BIT	LATENT
366	RAW	3.3	25.1	64.2	10.7	1.6	13650.	0.0	0.0	0.0	0.0	73.0	14633.	2790.	0.0	0.	MV BIT	MARGINAL
799	RAW	4.5	25.6	59.3	15.1	1.3	12960.	0.0	0.0	0.0	0.0	71.2	14469.	2600.	0.0	0.	MV BIT	LATENT

COUNTY: 129 MORGAN

128	RAW	2.6	37.3	56.8	5.9	0.8	14106.	0.0	0.0	0.0	0.0	60.8	14546.	2832.	5.5	47.	HVA BIT	PREMIUM
134	RAW	1.6	39.2	51.3	9.5	2.9	13588.	0.0	0.0	0.0	0.0	57.7	14455.	2440.	0.0	0.	HVA BIT	LATENT
147	RAW	2.3	38.7	58.0	3.3	1.4	14510.	5.4	81.9	2.0	6.0	60.4	14504.	2300.	0.0	0.	HVA BIT	MARGINAL
151	RAW	2.4	37.7	55.5	6.7	2.7	14135.	5.3	78.0	1.9	5.4	60.4	14488.	2280.	0.0	0.	HVA BIT	LATENT
168	RAW	2.6	37.5	50.5	12.1	4.1	13310.	0.0	0.0	0.0	0.0	58.8	14265.	2310.	8.0	65.	HVA BIT	LATENT
212	RAW	2.4	39.3	54.5	6.2	2.8	14280.	5.3	76.8	1.9	4.8	58.9	14521.	2225.	7.0	61.	HVA BIT	LATENT
234	RAW	2.8	39.4	56.0	4.6	1.6	14452.	5.4	81.3	2.1	7.1	59.2	14546.	2346.	0.0	0.	HVA BIT	MARGINAL
256	RAW	3.6	37.7	56.8	5.5	0.8	14430.	0.0	0.0	0.0	0.0	60.5	14649.	2590.	0.0	0.	HVA BIT	PREMIUM

AVERAGE COALBED ANALYSES FOR STATE: 47 TENNESSEE

*****PROXIMATE*****
MOI DRY DRY DRY
REC VOL FIXD ASH
MATT CARB*****ULTIMATE*****
DRY DRY DRY DRY
HYD CAR NIT OXY

BED TYPE ANAL MOI REC VOL FIXD ASH DRY SUL DRY BTU DRY BTU DMMF FC BTU AST AVER FSI AVER HGI RANK GRADE

270	RAW	3.2	32.4	59.0	8.6	2.2	14038.	5.0	78.9	1.6	3.8	65.6	14621.	2416.	0.0	0.	HVA BIT	LATENT
COUNTY: 133 OVERTON																		
312	RAW	2.9	36.8	51.9	11.3	3.2	13317.	5.0	74.6	1.4	5.7	59.8	14217.	2273.	0.0	0.	HVA BIT	LATENT
COUNTY: 141 PUTNAM																		
312	RAW	3.0	38.9	48.9	12.3	3.9	13164.	5.0	73.6	1.3	5.4	57.1	14095.	2158.	4.7	53.	HVA BIT	LATENT
312	WASH	1.9	37.6	48.7	13.7	4.4	12940.	0.0	0.0	0.0	0.0	58.0	14192.	2000.	0.0	0.	HVA BIT	LATENT
COUNTY: 143 RHEA																		
286	RAW	2.0	29.8	54.6	15.6	1.2	12710.	0.0	0.0	0.0	0.0	66.0	14735.	2430.	0.0	0.	HVA BIT	LATENT
295	RAW	2.6	30.5	56.9	12.7	1.1	13267.	0.0	0.0	0.0	0.0	66.2	14740.	2447.	0.0	0.	HVA BIT	LATENT
326	RAW	2.8	32.4	55.6	12.0	1.0	13425.	0.0	0.0	0.0	0.0	64.1	14795.	2606.	0.0	0.	HVA BIT	MARGINAL
COUNTY: 145 ROANE																		
286	RAW	2.0	29.2	59.7	11.1	0.7	13505.	4.7	79.4	1.5	4.0	68.1	14894.	2505.	0.0	0.	HVA BIT	MARGINAL
295	RAW	4.1	32.8	57.3	10.0	0.7	13442.	4.7	73.4	1.4	6.8	64.4	14269.	2366.	0.0	0.	HVA BIT	MARGINAL
COUNTY: 151 SCOTT																		
129	RAW	4.7	36.1	52.5	11.5	1.4	13133.	4.9	73.5	1.8	7.2	60.1	14003.	2565.	4.7	47.	HVA BIT	MARGINAL
134	RAW	2.4	36.7	50.6	12.7	3.6	12941.	4.9	73.1	1.6	5.9	59.4	14069.	2307.	6.5	47.	HVA BIT	LATENT
135	RAW	3.5	35.0	53.6	11.4	1.0	13188.	5.1	78.5	1.9	7.1	61.4	14317.	2712.	5.1	47.	HVA BIT	MARGINAL
151	RAW	3.2	38.2	53.8	8.0	2.5	13761.	5.3	79.2	2.0	6.3	59.4	14204.	2373.	0.0	0.	HVA BIT	LATENT
168	RAW	3.4	37.9	55.7	6.4	1.8	14137.	5.2	77.6	1.8	6.2	60.2	14383.	2422.	7.2	54.	HVA BIT	LATENT
212	RAW	2.7	37.0	56.9	6.1	1.1	14254.	5.4	79.7	1.9	5.6	61.1	14673.	2555.	5.6	54.	HVA BIT	MARGINAL
799	RAW	2.0	38.2	44.6	17.2	4.1	12230.	4.7	67.0	1.3	5.7	55.6	14028.	2080.	3.5	45.	HVA BIT	LATENT
COUNTY: 153 SEQUATCHIE																		
129	RAW	2.8	31.8	59.5	8.7	1.3	13990.	0.0	0.0	0.0	0.0	66.0	14782.	2510.	0.0	0.	HVA BIT	MARGINAL
286	RAW	2.9	29.3	58.7	12.0	1.6	13395.	4.6	74.8	1.5	5.2	67.8	14653.	2476.	6.7	57.	HVA BIT	MARGINAL
799	RAW	2.3	28.8	61.9	9.4	1.3	13760.	0.0	0.0	0.0	0.0	69.1	14723.	2535.	0.0	0.	MV BIT	MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 47 TENNESSEE

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****					AST	AVER FSI	AVER HGI	RANK	GRADE		
		MOI REC	DRY VOL	DRY FIXD	DRY MATT	DRY CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR						DRY NIT	DRY OXY
COUNTY: 175 VAN BUREN																		
286	RAW	3.4	34.5	52.9	12.5	2.2	13196.	0.0	0.0	0.0	0.0	0.0	61.7	14338.	2246.	6.7	56.	HVA BIT LATENT
COUNTY: 185 WHITE																		
295	RAW	3.1	35.7	52.2	12.2	3.6	13280.	4.9	73.2	1.5	4.7	60.8	14239.	2155.	0.0	0.	HVA BIT LATENT	
326	RAW	3.0	40.9	48.4	10.7	4.3	13460.	5.1	73.2	1.5	5.2	55.5	14105.	2140.	0.0	0.	HVA BIT LATENT	
327	RAW	3.2	39.6	52.5	7.9	2.9	13850.	5.3	76.9	1.2	5.8	57.9	14221.	2350.	0.0	0.	HVA BIT LATENT	

AVERAGE COALBED ANALYSES FOR STATE: 48 TEXAS

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AST	AVER FSI	AVER HGI	HANK	GRADE
		MOI REC	DRY VOL	DRY MATT	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU												
COUNTY: 21 BASTROP																										
799	RAW	24.1	43.5	42.5	14.0	1.5	10930.	0.0	0.0	0.0	0.0	50.3	9242.	0.	0.0	0.	SUBBIT C									
COUNTY: 143 ERATH																										
799	RAW	2.2	31.8	40.2	28.0	3.1	10390.	0.0	0.0	0.0	58.4	13885.	0.	0.0	0.	HVB BIT LATENT										
COUNTY: 331 MILAM																										
799	RAW	26.3	43.9	42.4	13.7	1.5	10947.	4.6	62.3	1.3	15.7	49.9	8942.	2295.	0.0	0.	SUBBIT C									
COUNTY: 363 PALO PINTO																										
799	RAW	4.1	37.0	47.5	15.5	3.0	12480.	0.0	0.0	0.0	57.7	13835.	2280.	0.0	0.	HVB BIT LATENT										
COUNTY: 479 WEBB																										
799	RAW	3.9	48.4	40.9	10.7	2.4	13103.	0.0	0.0	0.0	46.6	13833.	2790.	0.0	0.	HVB BIT LATENT										

AVERAGE COALBED ANALYSES FOR STATE: 49 UTAH

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****					*****					AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY MATT	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU							
COUNTY: 7 CARBON																					
0001	RAW	3.6	44.1	48.1	7.9	0.7	13411.	0.0	0.0	0.0	0.0	52.6	13993.	2297.	0.0	0.	HVB BIT	PREMIUM			
0002	RAW	3.8	43.7	49.4	6.9	0.4	13385.	0.0	0.0	0.0	0.0	53.5	13802.	2217.	2.2	0.	HVB BIT	PREMIUM			
0002	WASH	5.2	44.3	49.4	6.3	0.5	13490.	0.0	0.0	0.0	0.0	53.1	13607.	2240.	1.5	0.	HVB BIT	PREMIUM			
7999	RAW	5.6	43.2	50.0	6.8	0.6	13368.	5.4	75.6	1.5	11.2	54.1	13479.	2365.	1.1	49.	HVB BIT	PREMIUM			
8002	RAW	4.5	39.9	53.3	6.8	1.0	13666.	5.4	77.0	1.6	8.7	57.7	13906.	2646.	4.5	0.	HVB BIT	PREMIUM			
8002	WASH	8.7	40.3	53.0	6.7	1.1	13717.	5.4	77.1	1.5	8.9	57.4	13276.	2717.	0.0	0.	HVB BIT	MARGINAL			
8020	RAW	4.9	40.5	51.4	8.1	0.7	13141.	5.1	74.6	1.5	10.4	56.5	13545.	2453.	2.1	45.	HVB BIT	MARGINAL			
8025	RAW	4.5	40.7	51.8	7.6	0.5	13226.	4.9	71.1	1.4	11.8	56.5	13646.	2330.	1.5	44.	HVB BIT	PREMIUM			
8025	WASH	4.5	40.8	53.7	5.5	0.5	13729.	0.0	0.0	0.0	0.0	57.2	13837.	2191.	1.5	41.	HVB BIT	PREMIUM			
8030	RAW	5.3	43.3	49.7	6.9	0.5	13302.	5.6	75.5	1.5	11.0	53.8	13493.	2297.	1.4	47.	HVB BIT	PREMIUM			
8030	WASH	7.9	45.0	49.1	6.0	0.5	13400.	5.5	74.7	1.5	11.6	52.5	13055.	2544.	1.3	45.	HVB BIT	PREMIUM			
8032	RAW	4.6	44.8	48.5	6.7	0.4	13406.	5.4	74.3	1.4	11.8	52.4	13689.	2268.	2.0	49.	HVB BIT	PREMIUM			
8032	WASH	7.0	44.8	49.4	5.9	0.5	13473.	5.5	75.6	1.4	10.6	52.8	13254.	2377.	0.0	51.	HVB BIT	PREMIUM			
8034	RAW	10.8	43.4	49.1	7.5	0.5	12533.	5.2	74.5	1.3	9.7	53.5	11998.	2250.	2.5	48.	HVC BIT	PREMIUM			
8036	RAW	3.6	43.9	48.8	7.3	0.4	13402.	5.6	74.6	1.4	10.8	53.0	13928.	2198.	1.7	45.	HVB BIT	PREMIUM			
8036	WASH	4.6	43.6	50.1	6.4	0.3	13444.	0.0	0.0	0.0	0.0	53.8	13691.	2199.	1.0	44.	HVB BIT	PREMIUM			
8040	RAW	4.1	46.3	46.8	6.9	0.9	13521.	5.9	74.4	1.5	9.9	50.7	13856.	2147.	2.2	47.	HVB BIT	PREMIUM			
8042	RAW	5.4	44.3	49.3	6.4	0.6	13405.	5.6	74.9	1.6	10.7	53.1	13495.	2426.	2.5	46.	HVB BIT	PREMIUM			
8043	RAW	3.5	45.0	47.3	7.6	0.7	13407.	5.6	75.8	1.3	10.4	51.7	13961.	2210.	1.7	0.	HVB BIT	PREMIUM			
8044	RAW	4.3	46.6	46.3	7.1	1.3	13490.	5.7	74.8	1.5	10.3	50.3	13778.	2020.	0.0	0.	HVB BIT	MARGINAL			
8046	RAW	6.3	44.1	48.9	7.0	0.8	13285.	5.5	74.5	1.5	11.3	53.0	13291.	2508.	1.3	44.	HVB BIT	PREMIUM			
8046	WASH	5.7	45.0	48.6	6.4	0.6	13583.	0.0	0.0	0.0	0.0	52.3	13631.	2228.	2.4	47.	HVB BIT	PREMIUM			
8087	RAW	5.7	46.8	47.2	6.0	0.9	13574.	0.0	0.0	0.0	0.0	50.6	13507.	2062.	2.0	48.	HVB BIT	PREMIUM			
9005	RAW	4.5	46.0	46.1	7.9	0.5	13302.	0.0	0.0	0.0	0.0	50.4	13762.	2222.	1.7	0.	HVB BIT	PREMIUM			
9005	WASH	5.9	44.2	49.3	6.5	0.5	13475.	0.0	0.0	0.0	0.0	53.1	13522.	2183.	0.0	0.	HVB BIT	PREMIUM			
9007	RAW	4.1	43.2	50.1	6.7	0.5	13390.	0.0	0.0	0.0	0.0	54.1	13735.	2170.	0.0	45.	HVB BIT	PREMIUM			
9007	WASH	5.4	43.3	51.0	5.8	0.5	13527.	0.0	0.0	0.0	0.0	54.4	13544.	2178.	1.5	0.	HVB BIT	PREMIUM			

AVERAGE COALBED ANALYSES FOR STATE: 49 UTAH

*****PROXIMATE*****
 MOI DRY DRY DRY DRY
 REC VOL FIXD ASH
 MATT CARB

*****ULTIMATE*****
 DRY DRY DRY DRY
 HYD CAR NIT OXY

MMMF BTU
 DMMF FC
 AST
 AVER FSI
 AVER HGI
 RANK
 GRADE

COUNTY: 15 EMERY

799	RAW	4.8	44.0	48.5	7.5	0.6	13443.	5.7	75.2	1.6	10.8	52.8	13781.	2410.	1.0	47.	HVB BIT	PREMIUM
800	RAW	6.1	40.9	52.3	6.7	0.8	13501.	0.0	0.0	0.0	0.0	56.6	13502.	2371.	0.0	0.	HVB BIT	PREMIUM
802	RAW	5.8	40.5	52.4	7.1	0.7	13391.	5.1	72.7	1.5	10.1	56.8	13505.	2444.	2.9	49.	HVB BIT	PREMIUM
830	RAW	7.2	46.5	47.7	5.8	0.6	13396.	5.7	76.1	1.6	12.2	51.0	13139.	2180.	2.2	51.	HVB BIT	PREMIUM
846	RAW	5.2	44.4	47.7	7.9	0.6	13384.	5.6	75.1	1.5	10.4	52.2	13728.	2298.	2.0	47.	HVB BIT	PREMIUM
852	RAW	7.6	41.1	49.7	9.1	0.8	12820.	0.0	0.0	0.0	0.0	55.3	12924.	2303.	1.0	45.	HVC BIT	MARGINAL
853	RAW	4.4	41.4	50.9	7.7	0.9	13325.	5.2	74.9	1.4	11.3	55.7	13723.	2139.	1.3	41.	HVB BIT	PREMIUM
855	RAW	5.1	45.0	47.8	7.2	0.5	13627.	5.8	76.3	1.5	10.1	51.9	13888.	2178.	2.7	48.	HVB BIT	PREMIUM
856	RAW	5.6	47.0	47.1	5.9	0.5	13700.	5.8	75.5	1.5	10.8	50.4	13713.	2155.	1.3	50.	HVB BIT	PREMIUM
886	RAW	5.6	44.1	49.6	6.4	0.7	13580.	0.0	0.0	0.0	0.0	53.3	13625.	2190.	2.0	0.	HVB BIT	PREMIUM

COUNTY: 17 GARFIELD

799	RAW	18.6	44.0	46.2	9.8	0.9	11954.	4.9	66.7	1.2	16.3	51.8	10568.	2194.	0.0	51.	HVC BIT	MARGINAL
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COUNTY: 19 GRAND

799	RAW	6.6	38.8	49.4	11.8	0.7	12564.	5.0	71.1	1.6	10.3	56.7	13234.	2696.	1.5	46.	HVB BIT	MARGINAL
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COUNTY: 21 IRON

799	RAW	8.2	43.0	42.7	14.2	6.3	11540.	4.7	65.5	1.2	10.6	51.5	11565.	2186.	1.2	55.	HVC BIT	LATENT
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COUNTY: 25 KANE

799	RAW	18.0	39.9	49.8	10.3	2.0	11931.	4.8	69.2	1.4	13.3	56.4	10572.	2260.	0.0	58.	HVC BIT	LATENT
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COUNTY: 41 SEVIER

799	RAW	4.8	40.6	48.9	10.6	1.9	12647.	0.0	0.0	0.0	0.0	55.5	13267.	0.	0.0	0.	HVB BIT	LATENT
848	RAW	6.3	45.1	45.3	9.6	0.5	12683.	5.3	71.6	1.3	12.2	50.6	13106.	2225.	1.0	48.	HVB BIT	MARGINAL
849	RAW	8.8	41.4	51.0	7.6	0.5	12848.	0.0	0.0	0.0	0.0	55.6	12612.	2246.	1.0	50.	HVC BIT	PREMIUM
851	RAW	8.0	42.3	47.8	9.9	0.4	12590.	5.2	73.2	1.2	12.0	53.6	12793.	2360.	0.0	0.	HVC BIT	MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 49 UTAH

BED	TYPE ANAL	*****APPROXIMATE*****					*****ULTIMATE*****					AST	AVER FSI	AVER HGI	RANK	GRADE	
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY						DMMF FC
COUNTY: 43 SUMMIT																	
799	RAW	14.3	43.3	51.6	5.1	1.4	12725.	0.0	0.0	0.0	0.0	54.8	11295.	2250.	0.0	46.	HVC BIT MARGINAL
850	RAW	14.7	43.3	50.6	6.1	1.3	12547.	5.1	71.7	1.4	14.6	54.4	11197.	2253.	0.0	0.	HVC BIT MARGINAL
COUNTY: 47 UINTAH																	
799	RAW	8.9	39.7	46.1	14.3	1.9	11938.	5.0	69.5	1.3	11.5	54.8	12426.	2580.	0.0	47.	HVC BIT LATENT

AVERAGE COALBED ANALYSES FOR STATE: 51 VIRGINIA

BED	TYPE	*****PROXY STATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI	DRY	WOL	WAT	FIXD	ASH	DRY	SOL	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY					
COUNTY: 27 BUCHANAN																									
001	RAW	3.0	29.8	61.0	8.6	1.1	14127.	4.9	89.8	1.6	4.2	68.2	14905.	2679.	7.4	67.	HVA D11	MARGINAL							
001	WASH	3.7	27.1	67.0	5.5	0.9	14785.	0.0	0.0	0.0	0.0	71.9	14927.	2400.	8.4	62.	HV D11	PREMIUM							
151	RAW	3.2	34.7	60.0	4.7	0.4	14643.	5.1	83.2	1.4	5.9	64.0	14860.	2903.	7.5	59.	HVA D11	PREMIUM							
174	RAW	2.5	31.0	61.6	7.4	0.9	14250.	5.0	80.1	1.7	4.9	67.2	14947.	2611.	6.7	68.	HVA D11	PREMIUM							
174	WASH	4.0	31.5	61.6	6.9	1.0	14411.	0.0	0.0	0.0	0.0	66.8	14771.	2849.	7.1	67.	HVA D11	PREMIUM							
176	RAW	2.4	31.5	60.3	4.2	1.1	14165.	5.0	80.2	1.5	4.6	60.4	14990.	2590.	7.0	63.	HVA D11	MARGINAL							
176	WASH	3.7	33.3	62.9	3.8	0.7	14860.	0.0	0.0	0.0	0.0	65.7	14787.	2910.	0.0	0.	HVA D11	PREMIUM							
177	RAW	3.4	30.4	57.0	4.6	0.9	13860.	0.0	0.0	0.0	0.0	66.7	14752.	2620.	8.5	64.	HVA D11	MARGINAL							
195	RAW	2.2	30.0	62.3	6.8	0.9	14460.	0.0	0.0	0.0	0.0	67.5	15115.	2900.	5.5	63.	HVA D11	PREMIUM							
210	RAW	2.6	29.2	63.5	7.2	0.9	14421.	5.1	83.1	1.6	3.9	69.1	15083.	2721.	7.6	73.	MV D11	PREMIUM							
210	WASH	3.0	29.9	64.4	5.7	0.6	14687.	4.9	81.9	1.6	4.5	68.8	15004.	2811.	7.0	71.	HVA D11	PREMIUM							
216	RAW	2.3	23.4	67.3	4.8	1.1	14274.	4.0	82.1	1.4	3.0	75.2	15131.	2702.	7.7	96.	MV D11	MARGINAL							
216	WASH	2.5	22.0	64.7	6.6	0.9	14309.	0.0	0.0	0.0	0.0	76.1	15169.	2807.	7.9	0.	MV D11	MARGINAL							
252	RAW	2.0	26.1	67.9	6.1	1.3	14608.	0.0	0.0	0.0	0.0	72.9	15088.	2337.	9.0	91.	MV D11	MARGINAL							
252	WASH	2.5	24.5	71.9	3.7	0.6	15110.	4.8	85.7	1.6	4.3	75.0	15240.	2550.	0.0	0.	MV D11	PREMIUM							
259	RAW	2.6	23.2	72.0	4.2	0.7	15108.	4.8	87.0	1.4	2.9	76.3	15295.	2317.	8.8	95.	MV D11	PREMIUM							
259	WASH	3.4	22.3	74.3	3.3	0.7	15251.	0.0	0.0	0.0	0.0	77.3	15171.	2273.	9.0	98.	MV D11	PREMIUM							
266	RAW	2.2	22.4	66.7	10.9	0.6	13830.	4.5	79.5	1.4	3.1	75.8	15197.	2910.	8.5	93.	MV D11	MARGINAL							
890	RAW	3.3	31.5	61.5	7.0	1.2	14330.	0.0	0.0	0.0	0.0	66.8	14786.	2530.	8.0	67.	HVA D11	MARGINAL							
931	RAW	4.8	26.4	63.3	10.3	1.1	13890.	4.7	78.7	1.6	3.6	71.5	14637.	2610.	9.0	88.	MV D11	MARGINAL							
469	WASH	3.5	28.4	66.4	5.2	0.7	14670.	0.0	0.0	0.0	0.0	70.5	14825.	2760.	8.0	0.	MV D11	PREMIUM							
471	RAW	2.0	23.0	73.8	3.2	0.7	15240.	0.0	0.0	0.0	0.0	76.6	15368.	2407.	0.0	0.	MV D11	PREMIUM							
471	WASH	4.5	23.5	72.1	4.4	0.8	15040.	0.0	0.0	0.0	0.0	76.0	14952.	2407.	8.5	92.	MV D11	PREMIUM							
486	RAW	3.0	30.4	63.5	6.1	0.9	14600.	0.0	0.0	0.0	0.0	68.2	15004.	2575.	8.0	79.	HVA D11	PREMIUM							
488	WASH	3.6	31.0	62.4	6.6	0.8	14482.	0.0	0.0	0.0	0.0	67.4	14882.	2860.	7.0	70.	HVA D11	PREMIUM							
COUNTY: 51 DICKENSON																									
001	RAW	2.0	31.0	60.3	6.4	0.7	14123.	0.0	0.0	0.0	0.0	65.7	15150.	2579.	7.5	64.	HVA D11	MARGINAL							
001	WASH	2.4	31.5	61.8	6.7	0.8	14684.	0.0	0.0	0.0	0.0	66.8	15114.	2680.	8.0	0.	HVA D11	PREMIUM							
174	RAW	5.0	33.1	60.8	6.1	0.9	14450.	0.0	0.0	0.0	0.0	65.3	14846.	2700.	7.2	61.	HVA D11	PREMIUM							

AVERAGE COALBED ANALYSES FOR STATES: 51 VIRGINIA

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****					*****AVERAGE*****					GRADE
		MOI REC	DRY VOL	DRY FIB	DRY FIB	DRY CARB	DRY MOI	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DRY FC	DRY BTU	AST	
174	WASH	2.5	35.1	62.2	4.7	0.8	14716.	5.2	84.5	1.9	4.8	65.7	14989.	2747.	7.2	60.	MVA BIT PREMIUM
177	RAW	2.0	32.8	61.5	5.7	0.7	14500.	0.0	0.0	0.0	0.0	65.7	15025.	2470.	7.0	62.	MVA BIT PREMIUM
195	RAW	2.2	28.4	61.9	8.7	2.0	14210.	4.9	81.2	1.5	3.4	68.8	15019.	2440.	5.7	76.	MVA BIT LATENT
210	RAW	1.9	30.3	62.6	9.1	0.8	14077.	4.8	76.5	1.3	4.7	67.4	15162.	2759.	7.2	68.	MVA BIT MARGINAL
210	WASH	2.3	29.6	62.7	7.7	0.7	14335.	0.0	0.0	0.0	0.0	68.6	15140.	2779.	7.5	0.	MVA BIT PREMIUM
214	RAW	1.8	31.6	61.0	7.4	0.7	14382.	5.1	81.5	1.5	4.5	68.5	15230.	2599.	7.0	61.	MVA BIT PREMIUM
214	WASH	2.5	32.3	62.1	5.6	0.6	14681.	0.0	0.0	0.0	0.0	68.2	15159.	2741.	6.5	0.	MVA BIT PREMIUM
210	RAW	2.0	31.5	60.1	8.4	0.9	14228.	5.0	79.4	1.5	4.1	66.3	15068.	2461.	7.2	65.	MVA BIT MARGINAL
868	RAW	1.8	31.7	62.9	5.4	0.7	14690.	0.0	0.0	0.0	0.0	67.0	15204.	2780.	6.5	68.	MVA BIT PREMIUM
869	RAW	2.6	31.4	56.3	12.3	0.8	13610.	0.0	0.0	0.0	0.0	65.1	15107.	2610.	6.0	0.	MVA BIT LATENT
869	WASH	2.8	30.5	62.9	6.5	0.7	14542.	0.0	0.0	0.0	0.0	67.9	15125.	2728.	7.5	0.	MVA BIT PREMIUM
921	RAW	2.5	32.0	59.6	8.4	0.8	14241.	0.0	0.0	0.0	0.0	65.7	15121.	2380.	7.1	63.	MVA BIT MARGINAL
987	RAW	2.5	34.4	51.7	10.9	1.9	13590.	0.0	0.0	0.0	0.0	62.4	14694.	2460.	7.5	55.	MVA BIT LATENT
COUNTY: 105 LEE																	
001	RAW	4.7	37.5	52.4	16.1	1.1	13269.	0.0	0.0	0.0	0.0	59.0	13960.	2462.	3.7	45.	MVB BIT MARGINAL
126	RAW	3.5	38.1	52.5	9.4	0.9	13410.	5.2	77.2	1.7	7.8	58.6	14227.	2630.	0.0	0.	MVA BIT MARGINAL
135	RAW	2.9	37.0	54.3	8.8	0.8	13551.	5.1	77.1	1.7	7.7	60.1	14378.	2890.	5.0	43.	MVA BIT MARGINAL
142	RAW	3.2	36.8	52.3	6.9	1.6	13524.	5.1	76.5	1.5	7.0	58.2	14199.	2437.	4.2	45.	MVA BIT MARGINAL
151	RAW	3.0	38.2	57.7	4.1	0.8	14422.	5.5	82.4	1.5	7.8	60.5	14482.	2325.	5.2	45.	MVA BIT PREMIUM
157	RAW	3.1	39.5	59.2	9.9	2.2	13480.	4.8	71.0	1.4	6.3	57.4	14273.	2215.	4.7	50.	MVA BIT LATENT
168	RAW	3.3	39.3	52.2	8.5	1.6	13713.	5.2	76.7	1.7	6.7	57.7	14328.	2407.	5.0	47.	MVA BIT MARGINAL
185	RAW	3.5	30.7	52.6	12.7	2.4	12920.	0.0	0.0	0.0	0.0	61.5	14030.	2470.	5.5	55.	MVA BIT LATENT
866	RAW	2.7	36.5	54.5	9.0	0.8	13526.	5.1	75.9	1.7	7.6	60.5	14425.	2637.	0.0	0.	MVA BIT MARGINAL
878	RAW	5.1	37.9	57.3	0.8	0.5	14127.	0.0	0.0	0.0	0.0	60.6	14032.	2406.	3.0	0.	MVA BIT PREMIUM
908	RAW	5.0	30.3	50.0	10.1	3.5	13340.	0.0	0.0	0.0	0.0	57.4	13700.	2140.	5.0	45.	MVB BIT LATENT
945	RAW	4.1	39.8	54.7	5.5	0.9	14018.	5.3	80.4	1.6	8.2	58.3	14137.	2340.	0.0	0.	MVA BIT PREMIUM

BED	TYPE	*****PROXIMATE*****					*****ULTIMATE*****					AST	AVER FSI	AVER HGI	RANK	GRADE	
		NOI REC	DRY VOL MAT	DRY FIXD CARB	DRY ASH	DRY SUL	DRY HTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY						DMMF FC
COUNTY: 121 MONTGOMERY																	
377	RAW	2.4	11.8	66.9	21.3	0.7	12021.	0.0	0.0	0.0	0.0	0.0	87.1	15007.	2694.	1.0	84. SEMIANTH
377	WASH	2.0	12.1	66.2	21.6	0.6	11875.	0.0	0.0	0.0	0.0	0.0	86.7	15007.	2506.	0.0	0. SEMIANTH
COUNTY: 155																	
377	RAW	1.4	12.0	65.8	22.2	0.6	11093.	0.0	0.0	0.0	0.0	0.0	86.8	15003.	2520.	0.0	0. SEMIANTH
379	RAW	2.1	10.3	67.1	22.7	0.6	11851.	0.0	0.0	0.0	0.0	0.0	89.1	15158.	2609.	0.0	0. SEMIANTH
379	WASH	2.0	11.5	65.8	22.7	0.5	11770.	0.0	0.0	0.0	0.0	0.0	87.4	15096.	2350.	0.0	0. SEMIANTH
COUNTY: 167 RUSSELL																	
001	RAW	1.7	32.4	58.9	8.7	0.8	14140.	0.0	0.0	0.0	0.0	0.0	65.2	13206.	2329.	3.0	0. HVA BIT MARGINAL
001	WASH	1.9	35.4	58.5	6.0	0.6	14550.	0.0	0.0	0.0	0.0	0.0	62.7	15161.	2347.	0.0	0. HVA BIT PREMIUM
214	RAW	2.0	50.1	57.1	6.8	0.8	14353.	5.2	81.6	1.6	5.2	61.7	15078.	2286.	0.0	0. HVA BIT PREMIUM	
214	WASH	3.5	34.7	57.6	7.8	0.6	14223.	0.0	0.0	0.0	0.0	0.0	63.0	14855.	2313.	0.0	0. HVA BIT PREMIUM
216	RAW	2.2	35.6	56.7	7.6	0.7	14209.	5.2	79.5	1.6	5.4	62.0	62.0	15016.	2330.	6.5	51. HVA BIT PREMIUM
252	RAW	2.2	33.3	58.9	7.8	1.0	14200.	0.0	0.0	0.0	0.0	0.0	64.5	14994.	2200.	7.5	61. HVA BIT PREMIUM
259	RAW	2.4	32.8	60.1	7.1	0.8	14428.	5.2	82.8	1.5	4.6	65.2	15119.	2298.	7.7	55. HVA BIT PREMIUM	
266	RAW	1.0	29.1	51.4	19.5	0.5	12110.	0.0	0.0	0.0	0.0	0.0	65.2	15064.	2340.	6.5	0. HVA BIT LATENT
266	WASH	2.2	30.3	61.5	8.2	0.6	14200.	0.0	0.0	0.0	0.0	0.0	67.6	15135.	2393.	7.5	73. HVA BIT MARGINAL
268	WASH	2.5	29.2	63.7	7.1	0.5	14426.	4.9	84.7	1.5	4.0	69.1	15139.	2425.	7.2	72. MV BIT PREMIUM	
269	RAW	1.7	30.7	62.0	7.3	0.5	14290.	0.0	0.0	0.0	0.0	0.0	67.4	15156.	2300.	8.5	0. HVA BIT PREMIUM
269	WASH	2.4	30.5	61.3	9.2	0.5	14175.	5.2	83.0	1.4	4.5	67.4	15075.	2368.	6.8	0. HVA BIT MARGINAL	
421	RAW	1.9	37.1	54.8	8.1	0.5	14073.	0.0	0.0	0.0	0.0	0.0	60.2	15026.	2293.	7.0	51. HVA BIT MARGINAL
421	WASH	3.5	35.2	58.2	6.6	0.7	14444.	0.0	0.0	0.0	0.0	0.0	62.8	14876.	2337.	7.7	0. HVA BIT PREMIUM
COUNTY: 185 TAZEWELL																	
001	RAW	3.8	29.4	59.8	10.8	0.6	13815.	0.0	0.0	0.0	0.0	0.0	67.9	14901.	2433.	8.0	0. HVA BIT MARGINAL
216	RAW	3.4	28.5	62.8	8.7	0.6	14240.	4.8	81.2	1.5	3.3	69.5	15051.	15051.	2720.	7.0	96. MV BIT MARGINAL
259	RAW	2.6	28.4	60.3	5.3	0.7	14838.	5.1	85.4	1.5	3.8	70.5	15215.	15215.	2301.	8.1	86. MV BIT PREMIUM
259	WASH	3.6	31.1	63.3	5.6	0.6	14733.	0.0	0.0	0.0	0.0	0.0	67.5	14984.	2246.	8.0	0. HVA BIT PREMIUM
266	RAW	2.7	26.2	58.2	15.6	0.6	13065.	4.5	75.6	1.3	3.6	70.2	15129.	15129.	2845.	4.7	69. MV BIT LATENT
271	RAW	2.5	29.8	65.5	4.7	0.5	14946.	5.2	85.8	1.4	3.7	69.1	15259.	15259.	2336.	8.5	0. MV BIT PREMIUM

AVERAGE QUALIFIED ANALYSES FOR STATES: 51 VIRGINIA

BED	TYPE ANAL	*****OXI*****				*****ULTIMATE*****				*****				AST	AVER PSI	AVER NGI	RANK	GRADE
		SGI	DRY	DRY	DRY	SGI	DRY	DRY	DRY	DRY	DRY	DRY	DRY					
		REC	VOL	FIXD	ASH	REC	VOL	FIXD	ASH	HYD	DRY	DRY	DRY					
266	RAW	1.6	33.1	50.5	16.4	1.6	33.1	50.5	16.4	4.5	70.9	1.4	6.1	2424.	5.3	46.	HVA BIT	LATENT
267	RAW	1.6	36.3	57.2	4.5	1.6	36.3	57.2	4.5	5.5	83.0	1.6	5.9	2300.	0.0	0.	HVA BIT	PREMIUM
290	RAW	6.1	31.2	64.2	4.6	6.1	31.2	64.2	4.6	4.9	81.7	1.7	6.4	2730.	7.5	66.	HVA BIT	PREMIUM
420	RAW	2.5	32.9	61.4	5.7	2.5	32.9	61.4	5.7	0.0	0.0	0.0	0.0	2570.	8.0	57.	HVA BIT	PREMIUM
430	RAW	3.6	34.3	54.2	11.5	3.6	34.3	54.2	11.5	0.0	0.0	0.0	0.0	2670.	6.5	53.	HVA BIT	MARGINAL
472	RAW	3.5	34.8	56.9	4.3	3.5	34.8	56.9	4.3	4.0	78.3	1.5	6.3	2860.	7.0	46.	HVA BIT	MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 53 WASHINGTON

*****PROXIMATE*****
 MOI DRY DRY DRY
 REC VOL FIXD ASH
 HATT CARB

*****ULTIMATE*****
 DRY DRY DRY DRY
 HYD CAR NIT OXY

AST
 FSI
 AVER
 HGI
 RANK
 GRADE

COUNTY: 33 KING

BED	TYPE ANAL	MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMF FC	MMF BTU	AST	AVER FSI	AVER HGI	RANK	GRADE
001	RAW	12.4	39.1	44.0	16.9	0.7	11287.	5.2	68.0	1.6	8.8	53.9	11686.	2695.	0.0	0.	HVC BIT	LATENT
001	WASH	10.7	39.2	43.9	16.9	0.7	11607.	0.0	0.0	0.0	0.0	53.8	12290.	2815.	1.3	0.	HVC BIT	LATENT
402	RAW	12.9	35.7	48.8	15.5	0.6	11534.	4.8	67.0	1.5	12.0	58.7	11696.	2910.	0.0	0.	HVC BIT	LATENT
403	RAW	9.0	37.6	46.2	16.2	0.7	11710.	5.0	65.4	1.4	11.4	56.2	12481.	2590.	0.0	0.	HVC BIT	LATENT
403	WASH	7.2	30.3	46.3	21.4	1.0	11500.	0.0	0.0	0.0	0.0	63.1	13440.	0.	0.0	0.	HVB BIT	LATENT
404	RAW	13.2	38.5	48.9	12.6	0.8	12032.	5.0	67.3	1.5	13.5	56.7	11754.	2630.	0.0	0.	HVC BIT	LATENT
405	RAW	10.9	35.8	48.9	15.3	0.9	11661.	5.1	67.8	1.5	11.4	58.8	12076.	2655.	0.0	0.	HVC BIT	LATENT
406	RAW	7.5	34.7	47.7	17.7	0.9	11739.	4.8	65.7	1.6	10.4	59.1	13063.	2910.	0.0	0.	HVB BIT	LATENT
407	RAW	5.5	35.8	45.5	18.7	0.8	11763.	5.0	68.9	1.5	9.8	57.2	13621.	0.	0.0	0.	HVB BIT	LATENT
408	RAW	13.9	39.8	47.5	12.7	0.7	11990.	5.4	66.8	1.6	12.8	55.2	11628.	0.	0.0	0.	HVC BIT	LATENT
410	RAW	13.9	39.0	47.3	13.8	0.6	11620.	5.1	65.7	1.6	13.3	55.7	11410.	0.	0.0	0.	HVC BIT	LATENT
415	RAW	14.8	42.6	49.4	8.0	1.2	12730.	5.5	69.8	1.5	14.0	54.3	11582.	0.	0.0	0.	HVC BIT	MARGINAL
417	RAW	10.1	38.1	41.6	20.3	0.6	10890.	4.8	61.1	1.7	11.5	53.4	12115.	0.	0.0	0.	HVC BIT	LATENT
423	RAW	16.1	38.9	49.8	11.3	0.6	11743.	5.2	66.7	2.0	14.3	56.8	10903.	2210.	0.0	0.	HVC BIT	MARGINAL
425	RAW	15.3	38.8	51.1	10.1	0.7	11970.	5.2	67.6	2.0	14.5	57.5	11111.	2495.	0.0	0.	HVC BIT	MARGINAL
431	RAW	5.1	36.3	50.1	13.6	0.8	12610.	5.1	69.9	1.2	9.4	58.9	13794.	0.	0.0	0.	HVB BIT	LATENT
432	RAW	4.6	34.0	49.6	16.4	0.7	12437.	5.3	71.5	1.9	6.7	60.5	14169.	0.	0.0	0.	HVA BIT	LATENT
434	RAW	5.0	36.4	47.2	16.4	0.7	12265.	5.3	67.8	1.8	8.1	57.5	13906.	0.	0.0	0.	HVB BIT	LATENT
436	RAW	5.4	34.9	49.8	15.3	0.7	12240.	4.9	67.7	1.4	10.0	59.8	13626.	0.	0.0	0.	HVB BIT	LATENT
440	WASH	5.4	31.7	50.6	17.8	0.8	12195.	0.0	0.0	0.0	0.0	62.8	13975.	0.	0.0	0.	HVB BIT	LATENT
441	RAW	4.6	37.1	50.4	12.5	1.0	12835.	5.2	70.6	1.2	9.5	58.5	13913.	0.	0.0	0.	HVB BIT	LATENT
444	RAW	5.0	33.7	43.2	23.1	0.5	11020.	4.5	63.4	1.4	7.1	57.7	13531.	0.	0.0	0.	HVB BIT	LATENT
446	RAW	4.0	36.6	50.8	12.6	0.5	12850.	5.3	70.3	1.8	9.5	58.9	14119.	0.	0.0	0.	HVA BIT	LATENT
447	RAW	4.6	32.5	54.7	12.8	0.8	13340.	5.0	73.4	1.1	6.9	63.7	14545.	0.	0.0	0.	HVA BIT	LATENT
448	RAW	15.2	38.9	49.3	11.9	0.7	11725.	5.5	68.3	2.1	12.8	56.6	11084.	2613.	0.0	0.	HVC BIT	MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 53 WASHINGTON

BED	TYPE ANAL	*****PROXIMATE*****				*****ULTIMATE*****				*****				AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIAT	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT	DRY OXY	DRY FC				
449	RAW	7.3	43.5	50.2	6.3	0.7	13350.	5.5	73.7	1.9	11.9	54.0	13124.	0.	0.0	0.	HVB BIT PREMIUM
451	RAW	9.1	39.8	44.3	16.0	0.7	11677.	4.8	64.8	1.7	12.1	53.6	12497.	0.	0.0	0.	HVC BIT LATENT
453	RAW	7.4	40.4	47.5	12.1	0.6	12420.	5.2	69.0	1.6	11.5	54.7	13007.	0.	0.0	0.	HVB BIT LATENT
455	RAW	9.5	40.1	49.8	10.1	0.7	12655.	5.1	70.8	1.7	11.6	56.0	12638.	0.	0.0	0.	HVC BIT MARGINAL
458.	RAW	6.2	34.4	46.0	17.5	0.6	12008.	5.1	68.7	1.3	8.3	59.4	13621.	2555.	0.0	0.	HVB BIT LATENT
460	RAW	4.4	34.9	49.9	15.2	0.6	12390.	5.1	69.0	1.5	8.6	59.8	13963.	2460.	0.0	0.	HVB BIT LATENT
478	RAW	10.7	34.7	37.6	27.8	0.4	9940.	0.0	0.0	0.0	0.0	53.8	12056.	2640.	0.0	0.	HVC BIT LATENT
799	RAW	10.6	37.7	46.8	15.4	0.8	11790.	5.0	65.5	1.4	11.2	56.3	12285.	2562.	1.0	0.	HVC BIT LATENT
799	WASH	12.2	38.7	46.4	14.9	0.7	11834.	5.0	66.7	1.5	12.9	55.4	12033.	2695.	1.0	0.	HVC BIT LATENT
826	RAW	12.6	40.4	43.5	16.1	1.1	11357.	4.9	64.7	1.4	13.3	52.8	11573.	2810.	0.0	0.	HVC BIT LATENT
826	WASH	14.1	39.7	45.2	15.0	0.5	11833.	0.0	0.0	0.0	0.0	54.1	11553.	2833.	0.0	0.	HVC BIT LATENT
827	RAW	12.7	38.7	48.4	12.9	0.7	11540.	0.0	0.0	0.0	0.0	56.4	11384.	2620.	0.0	0.	HVC BIT LATENT
827	WASH	16.4	40.6	49.9	9.5	0.7	12040.	0.0	0.0	0.0	0.0	55.7	10839.	2670.	0.0	0.	HVC BIT MARGINAL
828	RAW	8.8	42.5	50.6	7.0	0.7	13059.	5.4	72.5	1.9	12.8	54.8	12702.	2349.	0.0	0.	HVC BIT PREMIUM
828	WASH	11.5	42.8	50.1	7.1	0.7	12986.	0.0	0.0	0.0	0.0	54.3	12259.	2469.	0.0	0.	HVC BIT PREMIUM
829	RAW	10.8	39.7	47.0	13.3	0.5	11957.	5.3	65.0	1.8	12.2	55.0	12172.	2544.	0.0	0.	HVC BIT LATENT
829	WASH	10.7	38.5	47.1	14.4	0.6	11760.	0.0	0.0	0.0	0.0	55.9	12123.	2710.	0.0	0.	HVC BIT LATENT
960	RAW	13.3	39.5	44.1	16.5	0.5	11428.	0.0	0.0	0.0	0.0	53.7	11658.	2640.	0.0	0.	HVC BIT LATENT
960	WASH	15.7	40.0	45.0	15.0	0.5	11577.	5.0	64.9	1.5	13.0	53.8	11247.	2657.	0.0	0.	HVC BIT LATENT
973	RAW	18.0	40.8	42.0	17.2	0.5	11080.	0.0	0.0	0.0	0.0	51.7	10666.	0.	0.0	0.	HVC BIT LATENT
COUNTY: 37 KITTITAS																	
002	RAW	3.0	39.6	45.8	15.2	0.4	12530.	0.0	0.0	0.0	0.0	54.9	14396.	2460.	0.0	0.	HVA BIT LATENT
002	WASH	3.4	38.3	47.6	14.1	0.4	12760.	0.0	0.0	0.0	0.0	56.2	14407.	2623.	0.0	0.	HVA BIT LATENT
402	RAW	7.0	38.3	48.3	13.4	0.4	12230.	5.3	68.6	1.5	10.8	56.5	12993.	2320.	0.0	0.	HVC BIT LATENT
404	RAW	3.3	34.6	51.1	14.4	0.5	12525.	5.4	69.7	1.7	8.3	60.6	14174.	2585.	0.0	0.	HVA BIT LATENT
407	RAW	4.2	33.9	52.3	13.8	0.5	12900.	0.0	0.0	0.0	0.0	61.6	14345.	2360.	0.0	0.	HVA BIT LATENT
478	RAW	10.4	33.9	40.6	25.5	1.3	10020.	0.0	0.0	0.0	0.0	56.3	11742.	2760.	0.0	0.	HVC BIT LATENT
799	RAW	6.7	35.2	45.7	19.2	0.8	11650.	4.7	64.3	1.2	6.9	57.8	13357.	2403.	0.0	0.	HVB BIT LATENT
821	RAW	4.1	36.1	45.0	18.9	0.3	11863.	5.3	70.1	1.7	8.3	56.6	14093.	2683.	0.0	0.	HVA BIT LATENT

AVERAGE COALBED ANALYSES FOR STATE: 54 WEST VIRGINIA

BED	TYPE	*****PROXIMATE*****						*****ULTIMATE*****						DMF FC	MMF BTU	AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY									
137	WASH	3.2	35.9	59.3	4.7	0.7	14650.	5.2	82.7	1.5	5.6	62.7	14821.	2842.	6.3	45.	HVA BIT	PREMIUM		
151	RAW	3.1	36.9	54.9	8.2	1.1	13887.	5.2	78.4	1.6	6.8	60.4	14558.	2641.	5.7	46.	HVA BIT	MARGINAL		
151	WASH	3.0	37.3	57.2	5.5	1.0	14422.	5.3	81.4	1.5	5.4	61.0	14722.	2713.	7.1	50.	HVA BIT	PREMIUM		
154	RAW	5.5	37.3	56.9	5.8	0.8	14170.	5.2	79.2	1.5	7.5	60.9	14131.	2830.	4.5	49.	HVA BIT	PREMIUM		
157	RAW	2.7	38.3	54.5	7.3	2.0	14067.	5.3	78.4	1.5	5.9	59.5	14549.	2359.	6.8	48.	HVA BIT	LATENT		
168	RAW	3.5	37.0	55.6	7.3	1.3	13943.	5.0	77.3	1.3	4.7	60.7	14388.	2584.	6.7	55.	HVA BIT	MARGINAL		
168	WASH	4.2	38.3	56.1	5.6	0.9	14135.	0.0	0.0	0.0	0.0	59.9	14260.	2760.	0.0	0.	HVA BIT	PREMIUM		
896	WASH	3.4	37.0	57.6	5.3	0.8	14377.	5.3	81.8	1.6	6.0	61.3	14608.	2808.	7.7	46.	HVA BIT	PREMIUM		
930	RAW	3.8	37.5	56.4	6.2	1.1	14032.	0.0	0.0	0.0	0.0	60.6	14285.	2570.	5.5	48.	HVA BIT	MARGINAL		
958	RAW	2.7	37.0	59.1	3.9	0.6	14670.	0.0	0.0	0.0	0.0	61.8	14804.	2910.	0.0	0.	HVA BIT	PREMIUM		
958	WASH	3.7	35.5	57.6	6.9	0.7	14122.	0.0	0.0	0.0	0.0	62.4	14566.	2910.	6.5	0.	HVA BIT	PREMIUM		
959	WASH	3.8	37.1	57.2	5.7	0.7	14205.	0.0	0.0	0.0	0.0	61.1	14439.	2910.	6.0	47.	HVA BIT	PREMIUM		
965	RAW	2.5	34.6	53.3	12.1	0.8	13267.	0.0	0.0	0.0	0.0	61.5	14724.	2907.	0.0	0.	HVA BIT	LATENT		
965	WASH	3.5	35.4	55.8	8.8	0.8	13724.	0.0	0.0	0.0	0.0	61.8	14469.	2909.	5.0	40.	HVA BIT	MARGINAL		
967	RAW	4.1	36.3	55.1	8.6	1.3	13714.	5.3	80.8	1.5	6.9	61.0	14252.	2771.	5.4	48.	HVA BIT	MARGINAL		
967	WASH	3.3	41.0	53.7	5.3	1.6	14357.	0.0	0.0	0.0	0.0	57.3	14484.	2410.	0.0	35.	HVA BIT	MARGINAL		
COUNTY:		7	BRAXTON																	
036	RAW	3.1	40.5	50.0	9.5	2.8	13513.	0.0	0.0	0.0	0.0	56.2	14149.	2103.	5.9	55.	HVA BIT	LATENT		
036	WASH	3.0	41.4	51.5	7.1	1.6	13933.	5.3	78.7	1.4	7.2	56.1	14381.	2228.	6.5	0.	HVA BIT	MARGINAL		
COUNTY:		9	BROOKE																	
036	RAW	5.6	37.0	51.6	11.5	2.9	12964.	5.0	74.6	1.5	7.0	59.4	13469.	2201.	6.5	54.	HVB BIT	LATENT		
036	WASH	5.4	38.0	54.7	7.3	1.9	13733.	0.0	0.0	0.0	0.0	59.8	13809.	2273.	7.0	51.	HVB BIT	LATENT		
COUNTY:		15	CLAY																	
076	RAW	3.9	38.6	52.5	9.0	2.1	13625.	5.1	75.4	1.5	6.7	58.5	14173.	2610.	6.5	52.	HVA BIT	LATENT		
080	RAW	2.8	36.5	52.4	11.1	0.9	13317.	5.0	74.6	1.4	7.0	59.7	14515.	2910.	5.7	45.	HVA BIT	MARGINAL		
084	RAW	2.8	36.2	53.2	10.6	0.8	13412.	5.2	78.8	1.5	6.2	60.2	14554.	2881.	6.0	45.	HVA BIT	MARGINAL		
084	WASH	3.0	38.2	54.4	7.5	0.9	14023.	0.0	0.0	0.0	0.0	59.3	14621.	2903	6.5	44.	HVA BIT	PREMIUM		
087	RAW	1.7	37.9	51.8	10.3	0.6	13640.	5.1	76.2	1.4	6.4	58.4	14967.	2910.	3.5	38.	HVA BIT	MARGINAL		

AVERAGE COALBED ANALYSES FOR STATE: 54 WEST VIRGINIA

BED	TYPE ANAL	*****PROXIMATE*****				*****ULTIMATE*****												AST	MMMF BTU	AVER FSI	AVER HGI	RANK	GRADE
		NOI REC	DRY VOL MATT	DRY FIXD CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU										
COUNTY: 19 FAYETTE																							
001	RAW	2.8	27.9	63.4	8.7	0.9	14095.	4.8	81.3	1.5	3.7	70.2	14941.	2725.	6.5	69.	MV BIT	MARGINAL					
001	WASH	2.9	26.2	68.1	5.7	0.7	14614.	0.0	0.0	0.0	0.0	72.8	14997.	2786.	7.7	47.	MV BIT	PREMIUM					
084	RAW	3.9	35.5	58.9	5.6	0.7	14185.	0.0	0.0	0.0	0.0	62.8	14381.	2910.	5.7	44.	HVA BIT	PREMIUM					
111	RAW	3.5	34.9	56.7	8.5	0.9	13898.	5.3	79.3	1.6	5.8	62.6	14593.	2910.	6.7	43.	HVA BIT	MARGINAL					
157	RAW	2.8	29.4	63.0	7.6	0.7	14367.	5.0	83.4	1.5	3.8	68.8	15077.	2900.	0.0	0.	HVA BIT	PREMIUM					
167	RAW	2.1	34.7	57.5	7.8	2.2	14210.	0.0	0.0	0.0	0.0	63.3	14853.	2480.	6.5	59.	HVA BIT	LATENT					
168	RAW	3.0	33.1	60.5	6.3	0.9	14371.	5.1	81.5	1.5	5.1	65.2	14799.	2696.	8.1	59.	HVA BIT	PREMIUM					
168	WASH	3.1	38.0	56.7	5.3	0.9	14505.	0.0	0.0	0.0	0.0	60.4	14760.	2820.	7.0	53.	HVA BIT	PREMIUM					
170	RAW	2.5	33.5	60.1	6.4	0.8	14466.	5.4	81.1	1.5	5.2	64.6	15023.	2790.	9.0	71.	HVA BIT	PREMIUM					
176	RAW	2.6	30.2	63.4	6.3	0.8	14481.	5.1	82.5	1.5	4.7	68.3	15007.	2782.	7.4	74.	HVA BIT	PREMIUM					
179	RAW	2.7	31.6	61.5	6.8	0.8	14470.	5.4	82.6	1.6	4.2	66.6	15065.	2693.	7.1	59.	HVA BIT	PREMIUM					
285	RAW	2.6	25.5	69.9	4.6	0.7	14847.	4.9	85.4	1.7	3.6	73.7	15093.	2594.	8.4	96.	MV BIT	PREMIUM					
285	WASH	3.7	25.7	70.9	3.4	0.7	15061.	5.0	87.3	1.7	3.8	73.8	14940.	2502.	8.8	91.	MV BIT	PREMIUM					
318	RAW	2.6	20.8	72.8	6.4	0.8	14635.	4.6	83.3	1.5	2.8	78.4	15170.	2688.	8.5	97.	LV BIT	PREMIUM					
318	WASH	4.3	21.0	73.0	6.0	0.8	14691.	0.0	0.0	0.0	0.0	78.3	14883.	2525.	9.0	0.	LV BIT	PREMIUM					
334	RAW	3.0	19.8	70.8	9.4	0.9	14054.	4.4	79.6	1.2	3.2	79.1	15005.	2890.	7.8	92.	LV BIT	MARGINAL					
863	RAW	3.0	41.8	49.4	8.7	0.7	13800.	0.0	0.0	0.0	0.0	54.7	14626.	2880.	0.0	0.	HVA BIT	MARGINAL					
898	RAW	2.7	30.1	61.2	8.8	1.0	14120.	5.0	81.1	1.6	4.5	67.8	14989.	2635.	9.0	74.	HVA BIT	MARGINAL					
919	RAW	2.6	22.8	72.1	5.2	0.7	14786.	0.0	0.0	0.0	0.0	76.5	15123.	2567.	9.0	0.	MV BIT	PREMIUM					
919	WASH	3.9	23.1	72.2	4.7	0.7	14885.	4.8	84.4	1.6	3.7	76.3	14934.	2668.	9.0	91.	MV BIT	PREMIUM					
920	RAW	3.7	20.0	73.4	6.6	0.8	14522.	0.0	0.0	0.0	0.0	79.2	14905.	2770.	5.7	101.	LV BIT	PREMIUM					
920	WASH	7.2	18.9	72.6	8.5	0.6	14040.	0.0	0.0	0.0	0.0	80.1	14165.	2870.	0.0	0.	LV BIT	MARGINAL					
948	RAW	4.7	33.9	55.3	10.8	0.7	13350.	0.0	0.0	0.0	0.0	62.8	14226.	2910.	0.0	0.	HVA BIT	MARGINAL					
960	RAW	2.7	33.1	60.6	6.3	0.7	14520.	5.2	81.3	1.5	5.0	65.2	15041.	2805.	0.0	0.	HVA BIT	PREMIUM					
961	RAW	5.1	28.8	64.4	6.8	0.7	14483.	0.0	0.0	0.0	0.0	69.6	14675.	2883.	6.5	80.	MV BIT	PREMIUM					
964	RAW	2.7	32.9	59.0	8.1	1.1	14061.	0.0	0.0	0.0	0.0	65.0	14600.	2757.	0.0	0.	HVA BIT	MARGINAL					

AVERAGE COALBED ANALYSES FOR STATE: 54 WEST VIRGINIA

BED	TYPE	*****PROXIMATE*****										*****ULTIMATE*****										AVER PSI	AVER MOI	RAIR	GRADE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
		LOT REC	DRY YGL	DRY FIXD	DRY ASH	DRY SUL	DRY RFU	DRY HYD	DRY CAR	DRY KIT	DRY UXV	DRY FC	DRY RFU	DRY AST	DRY FST	DRY MOI																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
976	WASH	4.2	58.0	56.0	5.2	6.8	14545.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

AVERAGE COALBED ANALYSES FOR STATE: 54 WEST VIRGINIA

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HCI	RANK	GRADE
		MOI REC	DRY VOL MAT	DRY FIXD	DRY ASH	DRY CARB	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	DMMF BTU	AST										
COUNTY: 33 HARRISON																									
001	RAW	3.2	36.5	51.4	10.1	3.1	13367.	0.0	0.0	0.0	0.0	58.3	14051.	2127.	0.0	0.	HVA BIT	LATENT							
033	RAW	3.2	37.8	52.0	9.6	2.5	13544.	5.2	76.9	1.4	6.7	59.2	14229.	2196.	7.3	58.	HVA BIT	LATENT							
036	RAW	2.7	39.5	51.7	8.8	3.2	13747.	5.2	76.0	1.4	5.7	57.7	14309.	2104.	7.4	58.	HVA BIT	LATENT							
036	WASH	2.0	41.9	50.8	7.2	2.9	14020.	5.3	76.8	1.4	5.7	55.6	14383.	2099.	7.3	57.	HVA BIT	LATENT							
955	RAW	3.3	39.0	52.8	8.2	3.0	13768.	0.0	0.0	0.0	0.0	58.5	14161.	2105.	7.3	59.	HVA BIT	LATENT							
COUNTY: 59 KANAWHA																									
001	RAW	3.2	35.2	53.7	10.1	1.1	13562.	0.0	0.0	0.0	0.0	61.7	14524.	2786.	6.7	43.	HVA BIT	MARGINAL							
001	WASH	2.9	35.6	58.3	6.0	1.1	14364.	0.0	0.0	0.0	0.0	62.6	14746.	2781.	7.3	41.	HVA BIT	MARGINAL							
036	RAW	4.1	40.9	52.7	6.4	2.0	13795.	5.6	73.4	1.5	11.2	57.0	13916.	2230.	5.0	0.	HVA BIT	LATENT							
076	RAW	3.0	38.1	51.9	10.0	1.4	13430.	5.1	74.5	1.4	7.6	58.5	14258.	2680.	5.5	51.	HVA BIT	MARGINAL							
084	RAW	3.8	35.3	54.3	10.3	0.9	13390.	5.1	77.8	1.5	7.4	61.3	14307.	2845.	4.2	44.	HVA BIT	MARGINAL							
084	WASH	3.4	37.7	54.7	7.6	0.8	13830.	5.2	78.4	1.5	7.2	59.7	14398.	2893.	5.4	43.	HVA BIT	PREMIUM							
103	RAW	3.2	35.0	55.2	9.2	0.6	13676.	5.2	76.8	1.4	8.5	61.4	14542.	2909.	4.7	47.	HVA BIT	MARGINAL							
103	WASH	3.7	36.6	54.0	8.7	0.7	13726.	5.2	79.2	1.5	7.4	60.4	14447.	2910.	0.0	0.	HVA BIT	MARGINAL							
111	RAW	3.1	34.8	54.1	11.0	0.7	13377.	5.0	73.9	1.4	7.8	61.6	14555.	2672.	4.7	43.	HVA BIT	MARGINAL							
121	RAW	3.0	35.4	57.4	7.4	0.7	14010.	5.2	79.1	1.5	7.3	62.3	14655.	2862.	5.5	49.	HVA BIT	PREMIUM							
121	WASH	3.8	35.1	59.7	5.3	0.6	14464.	0.0	0.0	0.0	0.0	63.4	14671.	2910.	5.5	51.	HVA BIT	PREMIUM							
151	RAW	2.5	37.6	56.0	5.8	0.9	14312.	5.4	80.4	1.6	7.2	60.5	14730.	2554.	6.4	44.	HVA BIT	PREMIUM							
151	WASH	3.6	39.1	55.0	5.5	1.1	14347.	5.3	81.7	1.5	6.7	59.1	14530.	2590.	0.0	0.	HVA BIT	MARGINAL							
167	RAW	2.5	36.6	56.5	7.0	2.1	14182.	5.3	78.2	1.4	6.9	61.5	14633.	2270.	7.3	57.	HVA BIT	LATENT							
168	RAW	3.1	37.6	57.5	5.0	0.9	14407.	5.4	80.5	1.6	7.7	60.9	14509.	2512.	7.2	55.	HVA BIT	PREMIUM							
168	WASH	3.7	36.7	57.0	6.3	1.2	14264.	5.1	76.6	1.3	5.4	61.4	14546.	2704.	7.4	56.	HVA BIT	MARGINAL							
170	RAW	3.0	38.2	62.0	5.2	0.9	14498.	5.2	83.1	1.4	6.4	66.5	14762.	2793.	5.1	63.	HVA BIT	PREMIUM							
170	WASH	1.0	34.3	61.2	4.4	0.9	14800.	5.3	83.2	1.5	5.2	64.5	15162.	2550.	0.0	0.	HVA BIT	PREMIUM							
176	RAW	1.8	33.8	59.1	7.1	0.7	14370.	5.2	80.1	1.5	5.6	64.1	15160.	2876.	6.7	47.	HVA BIT	PREMIUM							
899	RAW	2.8	35.5	53.2	11.3	1.0	13302.	0.0	0.0	0.0	0.0	60.8	14526.	2687.	0.0	0.	HVA BIT	MARGINAL							
943	RAW	4.1	34.1	52.3	13.6	0.7	12876.	0.0	0.0	0.0	0.0	61.4	14264.	2910.	4.2	40.	HVA BIT	LATENT							
943	WASH	3.5	35.9	54.4	9.9	0.7	13502.	0.0	0.0	0.0	0.0	60.8	14370.	2910.	0.0	0.	HVA BIT	MARGINAL							
944	RAW	2.7	35.0	53.9	10.3	0.9	13517.	0.0	0.0	0.0	0.0	60.7	14628.	2677.	6.0	0.	HVA BIT	MARGINAL							

AVERAGE COALBED ANALYSIS FOR STATE: 54 WEST VIRGINIA

BED	TYPE ANAL	*****APPROXIMATE*****										*****ULTIMATE*****										AVR PSI	AVR HGI	RANK	GRADE
		COI REC	DRY VOL	DRY FIB	DRY ASH	DRY SUL	DRY BTU	DRY HVO	DRY CAR	DRY NIT	DRY OXY	DRMF FC	DRMF BTU	AST											
958	RAW	3.1	35.7	57.0	7.4	0.7	13872.	0.0	0.0	0.0	0.0	62.0	14473.	2692.	6.0	46.	HVA BIT	PREMIUM							
958	WASH	3.0	37.0	58.0	5.0	0.7	14264.	0.0	0.0	0.0	0.0	61.4	14413.	2910.	6.2	40.	HVA BIT	PREMIUM							
960	WASH	3.0	31.8	59.9	8.3	1.2	14115.	0.0	0.0	0.0	0.0	66.1	14832.	2910.	7.5	62.	HVA BIT	MARGINAL							
961	WASH	4.5	32.2	61.9	6.0	1.0	14522.	0.0	0.0	0.0	0.0	66.4	14643.	2902.	8.5	0.	HVA BIT	PREMIUM							
965	RAW	3.7	35.3	53.0	11.8	0.8	13191.	0.0	0.0	0.0	0.0	60.8	14376.	2684.	3.2	44.	HVA BIT	MARGINAL							
965	WASH	5.4	35.9	54.7	9.4	0.6	13578.	0.0	0.0	0.0	0.0	61.0	14126.	2910.	4.0	0.	HVA BIT	MARGINAL							
976	WASH	4.7	33.9	60.2	5.9	1.0	14450.	0.0	0.0	0.0	0.0	64.5	14529.	2910.	7.5	57.	HVA BIT	PREMIUM							
COUNTY: 41 LEWIS																									
001	RAW	3.5	40.1	50.3	9.6	3.4	13423.	0.0	0.0	0.0	0.0	56.8	13922.	2113.	6.4	0.	HVA BIT	LATENT							
033	RAW	3.3	39.0	49.3	11.2	3.6	13196.	5.1	72.0	1.0	0.0	57.3	13951.	2140.	7.3	59.	HVA BIT	LATENT							
033	WASH	2.8	40.6	51.5	7.8	3.5	13808.	0.0	0.0	0.0	0.0	56.9	14152.	2083.	6.0	0.	HVA BIT	LATENT							
036	RAW	3.8	40.3	50.4	9.3	3.5	13465.	0.0	0.0	0.0	0.0	56.6	13867.	2122.	7.0	56.	HVA BIT	LATENT							
076	RAW	3.7	36.9	48.9	14.2	2.6	12880.	0.0	0.0	0.0	0.0	58.3	14177.	0.	0.0	0.	HVA BIT	LATENT							
955	RAW	3.7	39.9	48.8	11.3	3.5	13160.	0.0	0.0	0.0	0.0	56.2	13878.	2140.	7.5	56.	HVA BIT	LATENT							
COUNTY: 45 LOGAN																									
001	RAW	3.2	35.4	56.5	8.1	1.2	13886.	0.0	0.0	0.0	0.0	62.2	14533.	2686.	5.9	55.	HVA BIT	MARGINAL							
001	WASH	3.1	36.7	57.0	6.3	1.0	14192.	5.1	79.4	1.4	0.0	61.3	14576.	2750.	7.1	46.	HVA BIT	PREMIUM							
002	RAW	3.1	33.7	57.5	8.9	0.9	13900.	0.0	0.0	0.0	0.0	63.8	14736.	2607.	0.0	0.	HVA BIT	MARGINAL							
002	WASH	2.4	34.4	58.6	7.0	0.8	14236.	0.0	0.0	0.0	0.0	63.6	14886.	2661.	8.0	54.	HVA BIT	PREMIUM							
084	RAW	3.9	36.3	56.2	7.5	0.7	13881.	5.3	78.1	1.5	0.0	61.3	14373.	2905.	4.8	43.	HVA BIT	PREMIUM							
084	WASH	3.9	36.3	55.2	8.4	0.7	13690.	5.1	77.6	1.5	0.0	60.9	14315.	2906.	5.8	41.	HVA BIT	MARGINAL							
103	RAW	2.9	31.2	53.2	15.6	0.6	12655.	4.7	71.5	1.4	0.0	64.1	14601.	2910.	5.2	45.	HVA BIT	LATENT							
103	WASH	6.1	36.1	55.0	9.0	0.8	13560.	0.0	0.0	0.0	0.0	61.0	13914.	2910.	3.0	47.	HVE BIT	MARGINAL							
121	RAW	3.9	36.6	53.7	7.7	1.4	13783.	4.4	70.3	1.3	0.0	58.9	14196.	2595.	3.8	46.	HVA BIT	MARGINAL							
135	RAW	2.7	35.7	57.3	7.1	0.7	14119.	5.4	79.1	1.5	0.0	62.1	14736.	2753.	6.2	48.	HVA BIT	PREMIUM							
135	WASH	3.3	36.3	57.3	6.4	0.7	14164.	5.3	80.5	1.6	0.0	61.7	14600.	2832.	6.8	49.	HVA BIT	PREMIUM							
136	WASH	3.2	35.9	59.6	4.5	0.6	14724.	5.2	83.4	2.1	0.0	62.8	14884.	2828.	7.0	53.	HVA BIT	PREMIUM							
151	RAW	2.6	35.6	56.8	7.6	1.2	14037.	5.2	78.9	1.5	0.0	62.2	14696.	2682.	7.1	51.	HVA BIT	MARGINAL							

AVERAGE COALBED ANALYSES FOR STATE: 54 WEST VIRGINIA

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL	DRY HATT	DRY FIXD	DRY CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DRY FC	DRY BTU	DRY HMF	AST								
COUNTY: 45 LOGAN (CONTINUED)																									
151	WASH	2.8	36.8	56.5	6.7	1.1	14195.	5.2	80.4	1.5	0.3	61.2	14701.	2748.	7.2	46.	HVA BIT	MARGINAL							
154	RAW	2.6	35.0	59.2	5.9	0.7	14371.	5.3	81.3	1.5	0.1	63.3	14821.	2675.	7.7	48.	HVA BIT	PREMIUM							
154	WASH	3.0	37.0	57.3	5.7	0.7	14299.	0.0	0.0	0.0	0.0	61.2	14648.	2727.	7.2	0.	HVA BIT	PREMIUM							
157	RAW	3.3	39.1	53.0	7.9	1.7	13809.	5.4	77.0	1.5	0.9	58.3	14322.	2357.	5.6	45.	HVA BIT	MARGINAL							
157	WASH	4.7	35.8	59.5	4.7	0.7	14526.	0.0	0.0	0.0	0.0	62.9	14471.	2730.	7.0	42.	HVA BIT	PREMIUM							
168	RAW	2.6	33.8	59.8	6.5	0.7	14294.	5.2	79.6	1.5	0.3	64.4	14834.	2795.	6.7	59.	HVA BIT	PREMIUM							
168	WASH	2.2	33.0	62.0	5.1	0.6	14610.	0.0	0.0	0.0	0.0	65.6	15010.	2870.	8.0	59.	HVA BIT	PREMIUM							
170	RAW	3.1	33.8	58.7	7.6	0.7	14054.	0.0	0.0	0.0	0.0	64.0	14688.	2844.	5.7	49.	HVA BIT	PREMIUM							
170	WASH	2.0	35.1	60.6	4.4	0.6	14660.	0.0	0.0	0.0	0.0	63.7	14995.	2910.	8.0	56.	HVA BIT	PREMIUM							
176	RAW	2.9	34.4	58.6	7.0	0.8	14133.	5.2	80.8	1.5	0.1	63.5	14703.	2769.	6.6	53.	HVA BIT	PREMIUM							
176	WASH	4.2	35.4	59.2	5.4	0.7	14404.	5.4	81.1	1.7	7.1	63.1	14517.	2869.	7.4	51.	HVA BIT	PREMIUM							
873	WASH	5.4	32.9	62.7	4.4	0.6	14570.	0.0	0.0	0.0	0.0	66.0	14355.	2770.	8.0	0.	HVA BIT	PREMIUM							
913	RAW	2.6	36.1	57.2	6.7	1.1	14176.	0.0	0.0	0.0	0.0	61.9	14709.	2635.	7.5	0.	HVA BIT	MARGINAL							
913	WASH	2.6	36.8	58.0	5.2	0.8	14437.	0.0	0.0	0.0	0.0	61.6	14758.	2796.	7.9	47.	HVA BIT	PREMIUM							
916	RAW	2.7	38.1	57.3	4.6	0.7	14557.	0.0	0.0	0.0	0.0	60.5	14785.	2887.	0.0	0.	HVA BIT	PREMIUM							
916	WASH	3.1	36.9	57.5	5.7	0.9	14311.	0.0	0.0	0.0	0.0	61.4	14619.	2877.	7.0	47.	HVA BIT	PREMIUM							
930	RAW	2.2	32.8	57.9	9.3	1.0	13838.	0.0	0.0	0.0	0.0	64.6	14867.	2657.	0.0	0.	HVA BIT	MARGINAL							
947	RAW	3.2	36.5	57.0	6.5	0.6	14082.	0.0	0.0	0.0	0.0	61.4	14536.	2858.	5.0	40.	HVA BIT	PREMIUM							
956	RAW	2.4	34.7	57.7	7.7	1.3	14115.	0.0	0.0	0.0	0.0	63.2	14806.	2886.	0.0	0.	HVA BIT	MARGINAL							
956	WASH	2.6	36.1	57.2	6.8	1.0	14195.	0.0	0.0	0.0	0.0	61.9	14751.	2861.	7.6	48.	HVA BIT	PREMIUM							
957	RAW	2.4	33.6	59.5	6.9	0.6	14227.	0.0	0.0	0.0	0.0	64.5	14846.	2887.	7.5	54.	HVA BIT	PREMIUM							
960	RAW	3.2	33.7	61.9	4.4	0.6	14555.	0.0	0.0	0.0	0.0	65.1	14689.	2865.	7.0	51.	HVA BIT	PREMIUM							
961	WASH	4.6	33.6	62.1	4.4	0.6	14745.	0.0	0.0	0.0	0.0	65.3	14660.	2847.	7.5	53.	HVA BIT	PREMIUM							
966	RAW	2.6	35.4	56.7	7.8	1.2	13978.	5.3	80.1	1.5	6.7	62.2	14671.	2704.	7.2	50.	HVA BIT	MARGINAL							
974	RAW	2.9	35.2	55.8	9.2	1.1	13682.	0.0	0.0	0.0	0.0	61.9	14547.	2440.	0.0	0.	HVA BIT	MARGINAL							
974	WASH	4.3	36.7	55.8	7.5	1.0	13903.	0.0	0.0	0.0	0.0	60.9	14292.	2631.	5.0	0.	HVA BIT	PREMIUM							
978	WASH	3.0	35.6	59.8	4.9	0.8	14580.	0.0	0.0	0.0	0.0	63.0	14815.	2910.	7.0	52.	HVA BIT	PREMIUM							
985	WASH	4.1	36.4	56.3	7.4	0.9	14085.	5.2	79.4	1.5	5.7	61.3	14506.	2910.	7.5	42.	HVA BIT	PREMIUM							

AVERAGE COALBED ANALYSES FOR STATE: 54 WEST VIRGINIA

BED	TYPE	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI REF	CRY VOL	FIXD ATT	ASH	DRY SOL	DRY STU	HYD	DRY CAR	NIT	DRY UXX	DMF FC	DMF BTU	AST											
COUNTY: 47 MCDOWELL																									
001	RAW	3.3	20.5	72.7	5.8	0.8	14611.	0.0	0.0	0.0	0.0	0.0	76.7	15103.	2609.	8.4	0.	0.	LV BIT	PREMIUM					
001	WASH	4.1	18.7	73.7	7.6	0.7	14486.	0.0	0.0	0.0	0.0	0.0	80.5	14961.	2692.	7.5	0.	0.	LV BIT	PREMIUM					
176	RAW	2.9	30.8	63.4	5.9	1.2	14471.	4.7	81.5	1.6	6.9	68.0	14805.	2490.	0.0	0.0	0.	IVA BIT	MARGINAL						
195	RAW	2.5	31.6	58.7	9.7	1.2	13900.	0.0	0.0	0.0	0.0	0.0	65.9	14956.	2760.	6.5	65.	65.	IVA BIT	MARGINAL					
216	WASH	3.3	27.7	66.4	11.9	0.9	13650.	4.5	77.5	1.5	3.7	60.5	14941.	2910.	0.0	0.	0.	LV BIT	MARGINAL						
252	RAW	2.6	26.9	67.2	5.8	1.0	14638.	5.0	85.4	1.7	3.5	72.0	15056.	2671.	8.5	84.	84.	LV BIT	PREMIUM						
252	WASH	5.1	27.7	69.3	3.0	0.8	15120.	4.9	87.8	1.7	3.1	71.9	15021.	2551.	0.0	0.	0.	LV BIT	PREMIUM						
266	RAW	1.8	23.8	72.2	4.0	0.6	15077.	4.8	84.6	1.5	3.7	75.7	15355.	2323.	0.0	0.	0.	LV BIT	PREMIUM						
266	WASH	2.9	24.4	69.1	6.4	0.7	14663.	0.0	0.0	0.0	0.0	0.0	74.5	15172.	2680.	8.6	91.	91.	LV BIT	PREMIUM					
285	RAW	2.5	20.3	73.9	5.8	0.7	14776.	4.5	85.1	1.4	2.7	79.1	15245.	2597.	8.8	104.	104.	LV BIT	PREMIUM						
285	WASH	3.8	18.7	77.0	4.3	0.6	15056.	0.0	0.0	0.0	0.0	0.0	81.0	15080.	2533.	0.0	100.	100.	LV BIT	PREMIUM					
293	RAW	2.7	18.5	74.3	7.2	0.6	14546.	4.4	83.5	1.4	2.6	80.8	15232.	2771.	9.0	0.	0.	LV BIT	PREMIUM						
293	WASH	3.7	18.0	74.2	7.8	0.6	14450.	0.0	0.0	0.0	0.0	0.0	81.3	15056.	2829.	0.0	95.	95.	LV BIT	PREMIUM					
311	RAW	2.3	17.0	72.9	5.5	0.7	14157.	4.2	81.7	1.4	2.5	81.5	15274.	2614.	6.5	0.	0.	LV BIT	MARGINAL						
311	WASH	3.0	17.9	72.6	9.5	0.6	14166.	0.0	0.0	0.0	0.0	0.0	81.1	15178.	2641.	0.0	0.	0.	LV BIT	MARGINAL					
318	RAW	2.2	18.7	74.3	7.0	0.8	14613.	4.4	84.1	1.3	2.2	80.8	15369.	2529.	9.0	103.	103.	LV BIT	PREMIUM						
318	WASH	3.7	18.4	74.0	6.6	0.5	14707.	4.4	84.9	1.4	2.5	79.8	15149.	2542.	0.0	97.	97.	LV BIT	PREMIUM						
334	RAW	2.8	19.2	73.9	6.9	0.6	14668.	4.4	83.5	1.3	2.5	80.1	15254.	2627.	0.0	0.	0.	LV BIT	PREMIUM						
341	RAW	1.9	21.5	73.4	5.2	0.6	14915.	4.6	85.3	1.5	2.9	77.9	15401.	2505.	0.0	0.	0.	LV BIT	PREMIUM						
342	RAW	2.2	17.4	75.3	7.2	0.6	14549.	4.3	85.1	1.2	2.8	81.9	15320.	2411.	8.2	0.	0.	LV BIT	PREMIUM						
342	WASH	5.1	18.8	73.4	6.9	0.6	14564.	4.4	85.6	1.3	2.8	79.4	15126.	2484.	8.5	0.	0.	LV BIT	PREMIUM						
344	RAW	3.0	18.4	75.7	5.9	0.6	14772.	4.4	85.9	1.2	2.7	81.0	15177.	2401.	5.7	103.	103.	LV BIT	PREMIUM						
344	WASH	4.0	18.1	75.0	6.9	0.6	14610.	4.4	86.2	1.2	2.6	81.2	15029.	2499.	7.7	97.	97.	LV BIT	PREMIUM						
894	RAW	2.0	23.0	70.7	6.3	0.5	14620.	4.6	85.0	1.2	3.4	76.0	15281.	2320.	0.0	0.	0.	LV BIT	PREMIUM						
894	WASH	4.1	22.4	69.4	8.2	0.4	14265.	0.0	0.0	0.0	0.0	0.0	76.3	14896.	2165.	0.0	0.	0.	LV BIT	MARGINAL					
914	RAW	4.5	19.0	73.7	7.3	0.7	14555.	0.0	0.0	0.0	0.0	0.0	80.2	14936.	2780.	8.5	0.	0.	LV BIT	PREMIUM					
914	WASH	4.1	18.9	74.7	6.4	0.6	14700.	0.0	0.0	0.0	0.0	0.0	80.4	15026.	2847.	0.0	92.	92.	LV BIT	PREMIUM					
917	RAW	3.0	24.8	69.0	6.4	0.8	14635.	0.0	0.0	0.0	0.0	0.0	74.3	15099.	2407.	8.5	87.	87.	LV BIT	PREMIUM					
917	WASH	2.1	26.2	71.1	2.7	0.7	15280.	0.0	0.0	0.0	0.0	0.0	73.4	15304.	2180.	0.0	0.	0.	LV BIT	PREMIUM					
922	RAW	2.7	24.7	65.2	10.1	0.9	13973.	0.0	0.0	0.0	0.0	0.0	73.4	15075.	2660.	8.5	88.	88.	LV BIT	MARGINAL					

AVERAGE COALBED ANALYSES FOR STATE: 54 WEST VIRGINIA

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****										AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL MATT	FIXD CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMHF FC	MMHF BTU								
931	RAW	2.1	27.4	66.3	6.3	2.2	14580.	0.0	0.0	0.0	0.0	0.0	71.7	14995.	2150.	6.5	88.	LV BIT	LATENT		
932	RAW	2.8	29.9	64.0	6.2	1.0	14510.	0.0	0.0	0.0	0.0	0.0	68.8	14925.	2290.	9.0	88.	HVA BIT	PREMIUM		
990	RAW	3.2	17.7	75.8	6.5	0.7	14654.	4.3	85.7	1.2	2.8	0.0	81.7	15119.	2424.	6.5	102.	LV BIT	PREMIUM		
990	WASH	3.6	17.3	75.1	7.6	0.6	14509.	0.0	0.0	0.0	0.0	0.0	82.0	15093.	2624.	5.0	92.	LV BIT	PREMIUM		
991	RAW	2.9	19.2	75.8	5.0	0.6	14850.	0.0	0.0	0.0	0.0	0.0	80.3	15135.	0.	0.0	0.	LV BIT	PREMIUM		
991	WASH	2.5	17.5	76.0	6.5	0.6	14673.	0.0	0.0	0.0	0.0	0.0	81.9	15276.	2637.	6.3	91.	LV BIT	PREMIUM		
994	RAW	3.1	18.3	75.4	6.2	0.7	14644.	0.0	0.0	0.0	0.0	0.0	81.1	15083.	2350.	0.0	0.	LV BIT	PREMIUM		
994	WASH	2.7	17.1	76.1	6.8	0.6	14592.	0.0	0.0	0.0	0.0	0.0	82.3	15199.	2647.	6.0	91.	LV BIT	PREMIUM		
996	RAW	1.9	19.7	73.4	7.0	0.7	14685.	0.0	0.0	0.0	0.0	0.0	79.5	15451.	2800.	0.0	0.	LV BIT	PREMIUM		
996	WASH	4.7	19.6	71.3	9.1	0.7	14245.	0.0	0.0	0.0	0.0	0.0	79.3	14881.	2755.	0.0	0.	LV BIT	MARGINAL		
997	RAW	2.1	21.6	74.8	3.7	0.6	15160.	0.0	0.0	0.0	0.0	0.0	78.0	15367.	2442.	0.0	0.	LV BIT	PREMIUM		
997	WASH	4.3	21.0	72.3	6.7	0.6	14660.	0.0	0.0	0.0	0.0	0.0	78.1	14992.	2697.	9.0	97.	LV BIT	PREMIUM		
998	WASH	4.7	18.6	76.9	4.5	0.6	15015.	0.0	0.0	0.0	0.0	0.0	81.1	14914.	2682.	9.0	99.	LV BIT	PREMIUM		
999	WASH	8.7	19.1	74.0	6.9	0.7	14740.	0.0	0.0	0.0	0.0	0.0	80.2	14352.	2580.	8.5	96.	LV BIT	PREMIUM		
COUNTY: 49 MARION																					
029	RAW	2.0	39.3	48.5	12.3	4.3	13173.	0.0	0.0	0.0	0.0	0.0	56.7	14217.	2167.	7.7	60.	HVA BIT	LATENT		
036	RAW	2.3	37.7	54.3	8.0	1.8	13938.	5.3	78.2	1.6	6.0	6.0	59.8	14613.	2246.	8.0	57.	HVA BIT	MARGINAL		
036	WASH	2.3	39.8	52.9	7.4	2.3	13996.	5.3	78.1	1.5	6.2	6.2	57.9	14501.	2170.	7.6	57.	HVA BIT	LATENT		
COUNTY: 51 MARSHALL																					
036	RAW	3.0	42.0	49.0	9.0	4.5	13489.	5.2	74.3	1.3	6.6	6.6	55.1	13845.	2081.	7.4	56.	HVB BIT	LATENT		
036	WASH	3.2	41.6	48.4	10.0	4.7	13410.	0.0	0.0	0.0	0.0	0.0	55.1	13855.	2210.	0.0	0.	HVB BIT	LATENT		
COUNTY: 53 MASON																					
036	RAW	6.6	42.0	44.0	14.0	3.2	12277.	4.9	67.5	1.2	9.1	9.1	52.3	12938.	2436.	4.4	46.	HVC BIT	LATENT		
036	WASH	6.2	44.8	44.8	10.4	3.1	12845.	0.0	0.0	0.0	0.0	0.0	50.9	13076.	2462.	0.0	0.	HVC BIT	LATENT		
COUNTY: 55 MERCER																					
001	RAW	1.9	17.5	75.2	7.3	0.6	14520.	0.0	0.0	0.0	0.0	0.0	81.8	15352.	0.	0.0	0.	LV BIT	PREMIUM		
001	WASH	2.8	18.1	74.1	7.9	0.6	14417.	0.0	0.0	0.0	0.0	0.0	81.1	15198.	2780.	0.0	0.	LV BIT	PREMIUM		
318	RAW	3.7	20.3	75.3	4.4	0.6	15077.	4.8	86.2	1.3	2.4	2.4	79.2	15129.	2587.	8.8	0.	LV BIT	PREMIUM		
318	WASH	7.4	19.8	75.6	4.6	0.6	15007.	0.0	0.0	0.0	0.0	0.0	79.8	14500.	2620.	0.0	0.	LV BIT	PREMIUM		
334	RAW	3.1	19.1	75.7	5.1	0.7	14956.	4.7	84.4	1.2	2.2	2.2	80.4	15219.	2568.	6.4	100.	LV BIT	PREMIUM		

AVERAGE COALBED ANALYSES FOR STATE: 54 WEST VIRGINIA

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI PEC	DRY VOL MAT	DRY FIXD CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DMMF FC	MMMF BTU	AST						
252	RAW	3.0	25.8	68.1	6.2	2.1	14625.	4.9	83.8	1.7	3.1	73.5	14891.	2155.	8.5	0.	HV BIT	LATENT		
895	RAW	4.0	33.3	59.1	7.6	0.7	14080.	0.0	0.0	0.0	0.0	64.5	14578.	2855.	7.2	54.	HVA BIT	PREMIUM		
895	WASH	4.3	36.2	58.1	5.7	0.7	14380.	0.0	0.0	0.0	0.0	62.0	14540.	2910.	0.0	0.	HVA BIT	PREMIUM		
913	RAW	2.6	34.4	58.9	6.7	0.7	14274.	5.1	81.0	1.4	6.7	63.6	14865.	2827.	7.4	61.	HVA BIT	PREMIUM		
913	WASH	2.7	35.9	58.3	5.9	0.8	14370.	0.0	0.0	0.0	0.0	62.4	14792.	2843.	7.2	52.	HVA BIT	PREMIUM		
939	RAW	4.9	33.6	61.3	5.2	0.6	14285.	0.0	0.0	0.0	0.0	65.0	14258.	2815.	7.0	50.	HVA BIT	PREMIUM		
COUNTY: 61 MONONGALIA																				
001	RAW	3.2	33.5	54.8	11.7	2.6	13289.	0.0	0.0	0.0	0.0	63.3	14301.	2365.	8.1	61.	HVA BIT	LATENT		
023	RAW	3.2	34.6	49.6	15.8	1.3	12460.	0.0	0.0	0.0	0.0	60.1	14254.	2600.	8.0	0.	HVA BIT	LATENT		
029	RAW	2.4	35.5	52.1	12.4	2.6	13193.	4.9	72.6	1.5	5.4	60.7	14449.	2386.	8.1	59.	HVA BIT	LATENT		
029	WASH	2.7	37.1	51.9	11.0	2.6	13449.	5.1	74.4	1.5	5.4	59.4	14442.	2458.	7.7	59.	HVA BIT	LATENT		
033	RAW	2.9	33.3	55.1	11.6	2.0	13309.	4.9	74.5	1.5	5.6	63.5	14441.	2560.	6.0	62.	HVA BIT	LATENT		
036	RAW	2.3	35.6	55.0	9.4	2.8	13799.	5.1	76.5	1.5	4.8	61.8	14554.	2272.	8.0	85.	HVA BIT	LATENT		
036	WASH	2.1	37.4	54.3	8.3	2.4	13991.	5.2	77.0	1.6	5.6	60.1	14692.	2408.	7.5	57.	HVA BIT	LATENT		
063	RAW	1.8	32.3	58.6	9.1	2.4	13860.	0.0	0.0	0.0	0.0	65.5	14723.	2060.	6.5	67.	HVA BIT	LATENT		
071	RAW	2.4	30.4	60.1	9.5	1.3	13897.	4.9	78.8	1.4	5.2	67.3	14903.	2745.	8.5	72.	HVA BIT	MARGINAL		
937	RAW	2.7	33.3	54.0	12.7	2.5	13160.	0.0	0.0	0.0	0.0	63.1	14465.	2350.	8.0	0.	HVA BIT	LATENT		
949	RAW	2.5	35.5	53.8	10.7	2.5	13542.	0.0	0.0	0.0	0.0	61.3	14529.	2519.	0.0	0.	HVA BIT	LATENT		
949	WASH	2.3	39.0	52.0	9.0	3.3	13850.	0.0	0.0	0.0	0.0	58.3	14492.	2210.	7.2	63.	HVA BIT	LATENT		
955	RAW	2.8	34.6	54.5	10.9	2.4	13539.	0.0	0.0	0.0	0.0	62.3	14530.	2292.	7.7	61.	HVA BIT	LATENT		
955	WASH	2.1	36.6	54.8	8.6	2.5	13944.	5.3	76.8	1.5	5.1	60.9	14674.	2503.	0.0	0.	HVA BIT	LATENT		
COUNTY: 67 NICHOLAS																				
001	RAW	4.1	34.3	57.9	7.8	0.8	13850.	0.0	0.0	0.0	0.0	63.4	14334.	2847.	5.2	50.	HVA BIT	PREMIUM		
001	WASH	4.0	36.0	55.9	8.1	0.9	13931.	5.2	78.5	1.6	5.8	61.4	14484.	2696.	7.3	47.	HVA BIT	MARGINAL		
076	RAW	6.2	29.7	57.6	12.7	0.6	12420.	4.3	71.9	1.4	9.1	66.9	13291.	2910.	1.5	50.	HVA BIT	LATENT		
080	RAW	2.3	35.8	60.9	3.3	0.8	14680.	5.4	82.8	1.7	6.0	63.3	14754.	2700.	7.0	0.	HVA BIT	PREMIUM		
084	RAW	2.9	35.0	59.1	5.8	0.8	14244.	5.1	77.6	1.5	8.2	63.3	14533.	2776.	6.8	49.	HVA BIT	PREMIUM		
084	WASH	3.4	36.2	57.8	6.0	0.9	14262.	5.2	81.5	1.7	6.3	62.0	14591.	2749.	6.6	46.	HVA BIT	PREMIUM		
111	RAW	3.5	36.0	54.5	9.5	0.8	13652.	5.5	78.8	1.5	6.1	60.9	14505.	2910.	6.0	44.	HVA BIT	MARGINAL		
121	RAW	2.8	34.7	55.7	9.6	0.8	13655.	5.0	76.9	1.5	6.1	62.3	14634.	2910.	5.7	46.	HVA BIT	MARGINAL		

AVERAGE COALBED ANALYSES FOR STATE: 54 WEST VIRGINIA

BED	TYPE ANAL	*****PROXIMATE*****					*****ULTIMATE*****										AVER FSI	AVER HGI	RAIN	GRADE
		MOI REC	DRY VOL FAT	DRY FIXD CARB	ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DRY FC	MMMF BTU	AST						
COUNTY: 79 PUTNAM		3.5	41.1	50.3	8.6	2.6	13421.	5.3	76.2	1.4	7.8	55.9	13876.	2160.	0.0	0.	MVB BIT	LATENT		
COUNTY: 81 RALEIGH																				
001	RAW	4.5	22.3	69.3	8.4	0.9	14091.	4.2	82.7	1.3	2.9	76.4	14624.	2648.	7.7	73.	LV BIT	MARGINAL		
001	WASH	2.8	28.5	65.0	6.5	0.7	14423.	0.0	0.0	0.0	0.0	70.0	14946.	2855.	6.5	0.	MV BIT	PREMIUM		
084	RAW	2.3	34.0	56.9	9.2	0.7	13807.	0.0	0.0	0.0	0.0	63.3	14839.	2910.	7.0	46.	HVA BIT	MARGINAL		
121	RAW	2.5	32.3	61.6	6.0	0.7	14513.	5.0	84.7	1.6	4.3	66.1	15015.	2801.	0.0	0.	HVA BIT	PREMIUM		
121	WASH	2.9	33.6	59.3	6.8	0.6	14337.	0.0	0.0	0.0	0.0	64.2	14901.	2897.	0.0	0.	HVA BIT	PREMIUM		
137	RAW	1.7	34.4	58.7	6.9	1.2	14405.	5.3	81.5	1.6	4.7	63.0	15130.	2375.	0.0	0.	HVA BIT	MARGINAL		
151	RAW	2.0	34.8	58.6	6.5	1.0	14396.	0.0	0.0	0.0	0.0	63.3	15017.	2606.	7.5	62.	HVA BIT	PREMIUM		
160	RAW	3.1	30.9	61.5	7.6	0.9	14280.	0.0	0.0	0.0	0.0	67.2	14902.	2640.	0.0	0.	HVA BIT	PREMIUM		
170	RAW	2.1	34.6	59.0	5.4	1.1	14476.	5.4	84.1	1.5	5.8	63.8	14931.	2384.	8.5	60.	HVA BIT	MARGINAL		
176	RAW	2.0	28.7	64.1	7.2	1.0	14419.	4.9	81.5	1.5	3.9	69.2	15058.	2774.	6.7	64.	LV BIT	PREMIUM		
265	RAW	2.7	21.0	73.8	5.1	1.0	14643.	4.6	85.3	1.7	2.8	78.4	15125.	2519.	8.8	103.	LV BIT	PREMIUM		
265	WASH	4.2	20.7	75.1	4.2	0.6	15015.	4.8	89.3	1.8	2.1	78.9	14945.	2539.	9.0	100.	LV BIT	PREMIUM		
311	RAW	2.0	18.3	76.3	5.4	0.7	14801.	4.5	86.5	1.5	2.5	81.3	15187.	2775.	6.9	101.	LV BIT	PREMIUM		
311	WASH	3.2	18.3	70.5	5.2	0.7	14867.	4.6	87.6	1.7	2.4	81.2	15127.	2643.	8.5	97.	LV BIT	PREMIUM		
318	RAW	2.5	18.1	76.5	5.4	0.8	14840.	4.8	86.7	1.5	2.5	81.5	15236.	2666.	8.8	102.	LV BIT	PREMIUM		
318	WASH	3.0	19.5	76.4	4.1	1.1	15050.	0.0	0.0	0.0	0.0	80.3	15105.	2150.	0.0	0.	LV BIT	MARGINAL		
334	RAW	2.4	16.0	76.4	5.0	0.9	14875.	4.4	86.4	1.3	2.1	83.2	15202.	2700.	0.0	0.	LV BIT	PREMIUM		
342	RAW	2.0	16.8	77.5	5.7	0.8	14804.	4.3	84.1	1.3	2.5	82.9	15170.	2751.	8.4	0.	LV BIT	PREMIUM		
342	WASH	3.7	18.3	76.0	5.6	0.8	14804.	4.3	87.3	1.3	2.1	83.3	15044.	2806.	7.5	102.	LV BIT	PREMIUM		
344	RAW	2.4	16.4	78.1	7.5	0.8	14466.	4.3	85.0	1.2	2.3	83.1	15237.	2641.	7.5	0.	LV BIT	PREMIUM		
344	WASH	2.7	16.1	75.6	6.3	0.7	14337.	4.3	87.1	1.3	2.3	83.3	15175.	2900.	6.0	91.	LV BIT	MARGINAL		
888	RAW	3.9	20.5	72.7	6.9	0.8	14560.	0.0	0.0	0.0	0.0	78.7	14962.	2630.	8.5	0.	LV BIT	PREMIUM		
888	WASH	3.7	20.7	75.2	4.1	0.9	15069.	0.0	0.0	0.0	0.0	79.0	14973.	2566.	0.0	0.	LV BIT	PREMIUM		
891	RAW	2.7	16.5	75.5	5.9	0.8	14672.	0.0	0.0	0.0	0.0	81.0	15125.	2767.	8.5	100.	LV BIT	PREMIUM		
934	RAW	2.4	31.2	61.4	7.4	0.9	14310.	0.0	0.0	0.0	0.0	66.9	15027.	2733.	0.0	0.	HVA BIT	PREMIUM		
958	RAW	2.9	35.3	58.6	5.8	0.8	14296.	0.0	0.0	0.0	0.0	62.9	14769.	2908.	7.0	50.	HVA BIT	PREMIUM		

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BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE
		MOI REC	DRY VOL MAT	DRY FIXD CARB	DRY ASH	DRY SUL	DRY BTU	DRY HYD	DRY CAR	DRY NIT	DRY OXY	DRY FC	DRY BTU	ASH											
960	WASH	2.2	30.6	63.7	5.8	0.7	14460.	0.0	0.0	0.0	0.0	68.1	14967.	2900.	8.0	75.	HVA BIT	PREMIUM							
963	WASH	0.7	17.4	77.7	4.9	0.7	14910.	0.0	0.0	0.0	0.0	82.3	14544.	2890.	9.0	100.	LV BIT	PREMIUM							
990	RAW	2.3	15.9	74.8	9.3	0.8	14184.	0.0	0.0	0.0	0.0	83.5	15245.	2874.	0.0	0.	LV BIT	MARGINAL							
990	WASH	2.1	16.1	75.4	8.5	0.7	14306.	0.0	0.0	0.0	0.0	83.3	15293.	2890.	0.0	0.	LV BIT	MARGINAL							
991	WASH	3.4	16.9	79.1	4.0	0.6	15073.	0.0	0.0	0.0	0.0	82.9	15104.	2797.	8.5	0.	LV BIT	PREMIUM							
994	RAW	2.2	15.5	74.1	10.4	0.7	13957.	0.0	0.0	0.0	0.0	83.7	15241.	2890.	0.0	0.	LV BIT	MARGINAL							
994	WASH	3.9	16.1	77.3	6.6	0.7	14603.	0.0	0.0	0.0	0.0	83.5	14974.	2910.	7.0	98.	LV BIT	PREMIUM							
COUNTY: 83 RANDOLPH																									
001	RAW	2.7	29.7	55.2	15.2	2.0	12922.	0.0	0.0	0.0	0.0	66.5	14660.	2755.	7.0	74.	HVA BIT	LATENT							
076	RAW	3.4	29.6	57.7	12.7	1.4	13349.	4.6	71.9	1.5	4.4	57.2	14671.	2870.	7.2	74.	HVA BIT	LATENT							
080	RAW	4.6	32.3	55.8	12.0	2.2	13213.	0.0	0.0	0.0	0.0	64.5	14081.	2477.	5.0	73.	HVA BIT	LATENT							
084	RAW	2.9	29.5	58.0	12.5	1.6	13384.	4.9	76.3	1.5	4.3	67.4	14726.	2804.	7.2	73.	HVA BIT	LATENT							
084	WASH	3.8	31.0	59.3	9.7	1.3	13880.	0.0	0.0	0.0	0.0	66.6	14667.	2910.	7.5	0.	HVA BIT	MARGINAL							
167	RAW	3.6	32.9	62.6	4.5	0.8	14658.	5.4	83.7	1.5	5.0	66.0	14677.	2342.	0.7	59.	HVA BIT	PREMIUM							
216	RAW	4.7	23.6	67.8	8.6	0.6	14160.	0.0	0.0	0.0	0.0	74.9	14723.	2910.	7.5	70.	MV BIT	MARGINAL							
285	RAW	3.4	29.0	64.4	6.6	0.7	14445.	5.0	81.4	1.3	4.9	69.5	14898.	2814.	7.0	66.	MV BIT	PREMIUM							
799	RAW	4.9	27.1	67.0	5.9	0.5	14420.	0.0	0.0	0.0	0.0	71.7	14532.	2750.	4.5	71.	MV BIT	PREMIUM							
928	RAW	3.8	30.1	59.4	10.5	0.9	13810.	0.0	0.0	0.0	0.0	67.2	14784.	2910.	8.0	79.	HVA BIT	MARGINAL							
COUNTY: 91 TAYLOR																									
001	RAW	4.9	35.7	54.1	10.2	2.2	13490.	0.0	0.0	0.0	0.0	61.2	14025.	2220.	7.2	0.	HVA BIT	LATENT							
033	RAW	2.2	36.3	54.5	9.2	2.6	13760.	0.0	0.0	0.0	0.0	61.0	14540.	2120.	8.0	61.	HVA BIT	LATENT							
036	RAW	2.5	37.3	54.0	8.7	2.5	13922.	5.2	77.0	1.5	5.2	60.1	14593.	2202.	7.6	61.	HVA BIT	LATENT							
COUNTY: 93 TUCKER																									
063	RAW	3.2	23.0	66.1	11.0	0.7	13870.	0.0	0.0	0.0	0.0	75.1	15069.	2665.	9.0	95.	MV BIT	MARGINAL							
071	RAW	3.4	24.4	66.9	8.6	1.2	14127.	0.0	0.0	0.0	0.0	74.1	14825.	2701.	7.7	95.	MV BIT	MARGINAL							
950	RAW	2.3	22.5	71.4	6.1	0.9	14667.	0.0	0.0	0.0	0.0	76.7	15188.	2570.	0.0	0.	MV BIT	PREMIUM							

AVERAGE COALBED ANALYSES FOR STATE: 54 WEST VIRGINIA

BED	TYPE ANAL	*****PROXIMATE*****										*****ULTIMATE*****										AVER FSI	AVER HGI	RANK	GRADE	
		MOI REC	DRY VOL	DRY FIXD	DRY ASH	DRY SUL	DRY BTU	HYD	DRY CAR	DRY NIT	DRY OXY	DRY FC	MMMF BTU	AST												
COUNTY: 97 UPSHUR																										
001	RAW	3.2	37.3	52.7	10.0	2.6	13535.	0.0	0.0	0.0	0.0	59.6	14276.	2267.	7.2	0.	HVA BIT	LATENT								
033	RAW	2.8	37.2	54.3	8.5	2.4	13759.	5.2	76.4	1.3	6.4	60.3	14353.	2150.	7.7	60.	HVA BIT	LATENT								
033	WASH	3.5	40.2	52.6	7.2	2.9	14001.	5.2	77.9	1.7	5.8	57.6	14224.	2162.	7.1	0.	HVA BIT	LATENT								
036	RAW	2.4	38.9	51.2	9.9	3.6	13623.	5.1	75.5	1.3	4.9	58.0	14350.	2160.	7.0	58.	HVA BIT	LATENT								
055	RAW	3.3	35.5	47.8	16.7	3.0	12470.	0.0	0.0	0.0	0.0	59.0	14157.	0.	0.0	0.	HVA BIT	LATENT								
071	RAW	2.2	37.7	52.8	9.5	1.4	13711.	5.3	77.7	1.6	6.5	59.1	14699.	2382.	7.5	58.	HVA BIT	MARGINAL								
071	WASH	4.9	38.4	52.8	8.8	1.5	13793.	0.0	0.0	0.0	0.0	58.7	14220.	2410.	6.0	55.	HVA BIT	MARGINAL								
080	RAW	8.2	29.5	56.0	14.5	0.6	12170.	0.0	0.0	0.0	0.0	66.6	12970.	2910.	1.0	60.	HVC BIT	LATENT								
952	RAW	5.8	35.3	50.5	14.2	2.2	12680.	0.0	0.0	0.0	0.0	60.1	13658.	2210.	6.5	0.	HVB BIT	LATENT								
COUNTY: 99 WAYNE																										
157	WASH	4.5	40.5	55.1	4.4	0.8	14270.	0.0	0.0	0.0	0.0	58.0	14180.	2827.	5.0	0.	HVA BIT	PREMIUM								
COUNTY: 101 WEBSTER																										
167	RAW	2.8	37.2	59.4	3.4	0.7	14900.	5.8	83.1	1.9	5.1	61.8	14926.	2080.	8.0	0.	HVA BIT	PREMIUM								
285	RAW	2.8	31.1	62.7	6.2	0.6	14515.	5.1	82.6	1.4	4.7	67.3	15002.	2833.	7.5	66.	HVA BIT	PREMIUM								
285	WASH	3.0	29.9	63.9	6.2	0.7	14524.	0.0	0.0	0.0	0.0	68.7	14974.	2892.	8.2	66.	HVA BIT	PREMIUM								
318	RAW	2.6	27.5	59.7	12.8	0.6	13193.	5.0	79.5	1.1	5.3	69.4	14757.	2880.	7.2	57.	HV BIT	LATENT								
318	WASH	2.7	27.1	63.3	9.6	0.8	13730.	0.0	0.0	0.0	0.0	70.8	14745.	2730.	0.0	0.	HV BIT	MARGINAL								
946	RAW	4.8	34.2	63.0	2.9	0.8	14690.	0.0	0.0	0.0	0.0	65.2	14314.	2300.	6.0	0.	HVA BIT	PREMIUM								
COUNTY: 109 WYOMING																										
001	RAW	5.6	26.9	59.0	14.1	1.1	13210.	0.0	0.0	0.0	0.0	69.9	14372.	2490.	5.7	70.	HV BIT	LATENT								
001	WASH	3.4	27.6	66.3	6.1	0.9	14582.	4.4	88.5	1.6	1.8	71.2	14917.	2806.	6.9	68.	HV BIT	PREMIUM								
002	RAW	5.8	26.9	59.0	14.1	1.1	13210.	0.0	0.0	0.0	0.0	69.9	14372.	2490.	5.7	70.	HV BIT	LATENT								
121	RAW	5.4	31.8	55.1	13.2	0.8	13202.	5.2	76.9	1.3	5.6	64.4	14319.	2825.	7.4	60.	HVA BIT	LATENT								
121	WASH	2.5	35.1	59.2	5.7	0.7	14475.	5.2	82.7	1.5	5.2	63.2	14912.	2875.	7.9	67.	HVA BIT	PREMIUM								
135	RAW	2.1	35.2	59.0	5.8	0.9	14430.	5.4	81.1	1.5	5.3	63.1	14926.	2430.	7.5	0.	HVA BIT	PREMIUM								
157	RAW	3.2	32.6	61.9	5.5	0.8	14180.	5.3	80.2	1.5	6.7	66.0	14457.	2910.	2.0	0.	HVA BIT	PREMIUM								

AVERAGE COALBED ANALYSES FOR STATE: 54 WEST VIRGINIA

*****PROXIMATE*****
 MOI DRY DRY DRY
 REC VOL FIBD ASH
 RATT CARB

*****ULTIMATE*****
 DRY DRY DRY
 HYD CAR NIT OXY OXY

AVR
FSI
MGI
MARK
GRADE

COUNTY: 109 WYOMING (CONTINUED)

167	WASH	4.4	29.7	61.1	9.2	1.1	14050.	4.6	80.5	1.4	4.2	68.1	14761.	2790.	8.5	62.	HVA BIT	MARGINAL
168	RAW	3.4	32.0	62.7	5.3	0.7	14551.	5.4	83.3	1.5	5.0	66.7	14798.	2779.	7.8	58.	HVA BIT	PREMIUM
168	WASH	3.2	32.4	63.3	4.3	0.7	14808.	5.2	84.2	1.5	5.4	66.6	14911.	2847.	7.6	64.	HVA BIT	PREMIUM
170	RAW	3.4	32.8	60.8	6.4	0.6	14418.	5.3	83.4	1.5	5.2	65.5	14845.	2811.	7.9	59.	HVA BIT	PREMIUM
170	WASH	3.1	34.5	61.6	3.9	0.6	14774.	0.0	0.0	0.0	0.0	64.4	14842.	2910.	7.8	56.	HVA BIT	PREMIUM
174	WASH	5.0	29.8	64.0	6.2	1.3	14572.	4.9	83.4	1.3	3.3	68.9	14609.	2573.	7.5	79.	HVA BIT	MARGINAL
176	RAW	3.2	30.2	65.3	4.5	0.7	14780.	5.3	85.0	1.5	4.2	68.8	14910.	2805.	7.7	0.	HVA BIT	PREMIUM
176	WASH	3.6	29.5	64.5	6.0	0.6	14601.	4.9	82.6	1.5	4.0	69.1	14927.	2875.	8.0	72.	HVA BIT	PREMIUM
216	RAW	2.2	27.5	57.8	14.7	1.3	13155.	4.3	74.9	1.5	3.8	69.1	15031.	2910.	7.2	72.	HVA BIT	LATENT
252	RAW	2.8	26.0	70.1	3.9	1.1	15011.	5.2	85.2	1.7	2.7	73.4	15061.	2327.	8.5	93.	HVA BIT	MARGINAL
252	WASH	2.7	25.6	71.6	2.8	0.8	15238.	0.0	0.0	0.0	0.0	74.0	15175.	2460.	0.0	0.	HVA BIT	PREMIUM
285	RAW	2.5	22.4	72.9	4.7	0.9	14932.	4.9	87.2	1.5	2.7	77.0	15181.	2543.	8.7	95.	HVA BIT	PREMIUM
285	WASH	3.8	22.6	72.2	5.2	0.8	14865.	0.0	0.0	0.0	0.0	76.7	15002.	2581.	0.0	0.	HVA BIT	PREMIUM
311	RAW	2.7	18.9	74.8	6.3	1.1	14667.	4.6	85.5	1.5	2.3	80.6	15137.	2595.	6.2	106.	LV BIT	MARGINAL
311	WASH	3.1	18.3	75.6	6.2	0.7	14685.	0.0	0.0	0.0	0.0	81.2	15122.	2604.	9.0	100.	LV BIT	PREMIUM
318	RAW	2.1	18.3	76.7	5.0	1.1	14930.	0.0	0.0	0.0	0.0	81.4	15276.	2430.	0.0	0.	LV BIT	MARGINAL
318	WASH	3.8	18.7	75.1	6.3	0.9	14707.	0.0	0.0	0.0	0.0	80.8	14997.	2555.	0.0	0.	LV BIT	PREMIUM
334	RAW	2.8	18.1	75.4	6.5	0.8	14660.	4.3	84.5	1.3	2.8	81.4	15194.	2716.	9.0	0.	LV BIT	PREMIUM
342	RAW	2.7	16.9	75.7	7.5	0.9	14485.	4.6	84.6	1.3	2.4	82.6	15164.	2910.	8.0	0.	LV BIT	PREMIUM
344	RAW	2.4	17.1	75.5	7.3	0.7	14486.	4.3	85.0	1.2	2.4	82.3	15224.	2804.	7.0	0.	LV BIT	PREMIUM
344	WASH	4.0	17.3	75.4	7.2	0.6	14516.	4.3	85.2	1.2	2.6	82.0	14983.	2782.	7.2	91.	LV BIT	PREMIUM
888	RAW	4.3	18.2	75.6	6.2	0.9	14630.	0.0	0.0	0.0	0.0	81.3	14838.	2690.	8.0	106.	LV BIT	PREMIUM
915	RAW	4.6	24.9	70.1	5.0	1.2	14960.	0.0	0.0	0.0	0.0	74.4	14888.	2350.	8.5	0.	HVA BIT	MARGINAL
915	WASH	3.8	25.8	70.4	3.8	1.1	15057.	0.0	0.0	0.0	0.0	73.7	14933.	2270.	0.0	94.	HVA BIT	MARGINAL
991	RAW	2.6	16.8	75.5	7.7	0.7	14460.	0.0	0.0	0.0	0.0	82.5	15237.	2793.	0.0	0.	LV BIT	PREMIUM
994	WASH	5.3	17.6	73.9	8.5	0.7	14290.	0.0	0.0	0.0	0.0	81.6	14726.	2910.	0.0	0.	LV BIT	MARGINAL

AVERAGE COALBED ANALYSES FOR STATE: 56 WYOMING

*****PROXIMATE*****
 BED TYPE HOT DRY DRY DRY DRY DRY DRY DRY DRY DRY
 ANAL REC YUL YUL YUL YUL YUL YUL YUL YUL YUL YUL
 MATT CARR

*****ULTIMATE*****
 DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY
 SUL BTU BTU BTU BTU BTU BTU BTU BTU BTU BTU

AST AVER AVER AVER AVER AVER AVER AVER AVER AVER
 FSI FSI FSI FSI FSI FSI FSI FSI FSI FSI
 RANK RANK RANK RANK RANK RANK RANK RANK RANK RANK
 GRADE GRADE GRADE GRADE GRADE GRADE GRADE GRADE GRADE GRADE

COUNTY: 1 ALBANY

799 RAW 18.6 38.2 46.8 15.0 1.0 10880. 4.6 62.0 1.1 16.2 56.0 10068. 2500. 0.0 0. SUBBIT B

COUNTY: 3 BIG HORN

799 RAW 15.7 40.2 45.1 14.8 2.3 11420. 4.9 64.1 1.3 12.7 54.0 10874. 2180. 0.0 0. HVC BIT LATENT

COUNTY: 5 CAMPBELL

706 RAW 32.8 46.4 43.8 9.8 0.9 11520. 0.0 0.0 0.0 0.0 49.1 8272. 2320. 0.0 0. LIGNIT A

787 RAW 29.8 43.4 46.6 10.0 1.0 11629. 4.7 68.5 1.0 16.1 52.4 8756. 2228. 0.0 0. SUBBIT C

799 RAW 30.8 43.4 49.0 7.2 0.4 11750. 4.7 69.1 1.0 17.6 53.2 8565. 2180. 0.0 0. SUBBIT C

951 RAW 29.1 44.3 46.1 9.6 0.8 11580. 5.0 66.1 1.1 17.0 51.6 8799. 2283. 0.0 58. SUBBIT C

COUNTY: 7 CARBON

799 RAW 11.5 42.4 49.3 8.3 0.8 12323. 4.8 69.7 1.5 15.9 54.3 11756. 2297. 0.0 48. HVC BIT MARGINAL

804 RAW 11.1 46.7 48.7 6.6 0.4 12687. 5.0 70.0 1.3 15.6 50.4 11970. 2345. 0.0 50. HVC BIT PREMIUM

817 RAW 11.1 44.4 49.2 6.4 0.4 12577. 5.1 70.8 1.2 16.4 52.9 11866. 2347. 0.0 51. HVC BIT PREMIUM

818 RAW 11.7 44.3 48.6 7.1 0.5 12575. 0.0 0.0 0.0 0.0 52.7 11854. 2209. 0.0 48. HVC BIT PREMIUM

819 RAW 12.2 43.6 49.2 7.0 0.6 12575. 0.0 0.0 0.0 0.0 53.3 11766. 2355. 0.0 50. HVC BIT PREMIUM

955 RAW 11.0 43.0 49.4 7.6 0.4 12487. 0.0 0.0 0.0 0.0 53.8 11948. 2222. 0.0 53. HVC BIT PREMIUM

COUNTY: 9 CONVERSE

522 RAW 25.0 41.6 40.7 17.7 0.8 10040. 4.6 59.9 0.8 16.2 50.4 8722. 0. 0.0 0. SUBBIT C

523 RAW 24.8 45.3 45.0 9.7 0.9 11800. 4.8 65.5 0.8 18.3 50.4 9557. 0. 0.0 0. SUBBIT B

799 RAW 26.2 43.8 46.9 9.2 0.8 11396. 4.5 66.8 1.1 17.1 52.3 9025. 2275. 0.0 46. SUBBIT C

COUNTY: 11 CROOK

799 RAW 19.3 43.4 43.5 13.1 6.1 11481. 4.9 65.4 1.0 11.9 51.6 9889. 2263. 0.0 0. SUBBIT B

COUNTY: 13 FREMONT

799 RAW 26.7 41.3 50.0 6.7 0.8 11908. 4.9 70.2 1.5 16.0 55.4 10127. 2253. 0.0 52. SUBBIT B

AVERAGE COALBED ANALYSES FOR STATE: 56 WYOMING

*****PROXIMATE*****
 MOI DRY DRY DRY DRY DRY DRY DRY DRY DRY DRY
 REC VOL FIXD ASH SUL RTU HYD CAR NIT OXY FC BTU
 NAT CARB

*****ULTIMATE*****

GRADE

RANK

AVER
HGIAVER
FSI

AST

M ANF
BTUDMMF
FCDRY
OXYDRY
NITDRY
CARDRY
HYDDRY
RTUDRY
SULDRY
ASHDRY
FIXDDRY
VOLDRY
NATDRY
CARBDRY
RECDRY
ANALDRY
BED

786	RAW	24.4	44.5	49.7	5.9	0.7	12194.	4.7	69.2	1.5	17.8	53.1	9629.	2239.	0.0	51.	SUBBIT B
799	RAW	23.1	44.1	49.1	6.8	0.6	12024.	5.0	68.0	1.6	17.2	53.1	9756.	2311.	0.0	43.	SUBBIT B
952	RAW	23.6	43.3	52.3	4.4	0.5	12453.	0.0	0.0	0.0	0.0	55.0	9839.	2362.	0.0	42.	SUBBIT B
COUNTY: 35 SUBLETTE																	
799	RAW	9.1	40.9	52.2	7.0	0.7	12897.	5.3	75.6	1.4	13.3	56.5	12502.	2242.	1.0	52.	HVC BIT PREMIUM
COUNTY: 37 SWEETWATER																	
001	RAW	8.0	42.3	53.3	4.4	1.0	13433.	5.4	77.7	1.7	11.7	56.2	12806.	2388.	1.5	57.	HVC BIT PREMIUM
506	RAW	15.5	40.6	56.5	2.9	1.1	12700.	4.9	73.9	1.7	15.5	58.5	10918.	2180.	0.0	47.	HVC BIT MARGINAL
788	RAW	10.9	34.6	47.9	17.5	1.1	10540.	4.1	60.0	1.0	15.7	59.3	11162.	0.	0.0	0.	HVC BIT LATENT
789	RAW	14.2	39.8	55.1	5.1	1.3	12660.	5.1	72.3	1.6	14.6	58.5	11270.	2070.	0.0	0.	HVC BIT MARGINAL
790	RAW	8.1	41.8	53.2	5.0	0.9	13297.	5.2	74.5	1.6	13.3	56.4	12745.	2626.	0.0	45.	HVC BIT PREMIUM
791	RAW	11.6	41.8	52.8	5.4	1.1	13101.	5.1	74.8	1.5	13.3	56.2	12090.	2362.	1.0	48.	HVC BIT MARGINAL
792	RAW	15.0	42.8	52.8	4.4	1.0	13034.	5.1	74.6	1.6	14.0	55.6	11448.	2142.	1.5	49.	HVC BIT PREMIUM
793	RAW	11.7	43.8	53.5	2.7	1.0	13589.	5.2	74.7	1.6	13.8	55.3	12215.	2123.	2.0	51.	HVC BIT PREMIUM
794	RAW	11.5	42.0	53.4	4.6	1.0	13232.	5.1	75.1	1.6	13.1	56.3	12136.	2409.	1.5	50.	HVC BIT PREMIUM
794	WASH	10.2	43.7	51.8	4.6	1.0	13320.	0.0	0.0	0.0	0.0	54.6	12408.	2870.	0.0	0.	HVC BIT PREMIUM
795	RAW	16.0	41.3	55.5	3.2	0.9	13066.	5.3	75.2	1.7	14.6	57.6	11213.	2034.	0.0	0.	HVC BIT PREMIUM
796	RAW	12.7	42.6	53.1	4.2	1.1	13283.	5.2	74.6	1.7	12.9	55.9	11965.	2146.	1.0	48.	HVC BIT MARGINAL
796	WASH	10.3	43.2	54.1	2.7	0.9	13700.	0.0	0.0	0.0	0.0	55.9	12531.	2222.	0.0	51.	HVC BIT PREMIUM
797	RAW	14.0	41.4	54.2	4.3	0.8	13017.	5.3	75.2	1.6	13.3	57.0	11500.	2260.	1.5	51.	HVC BIT PREMIUM
798	RAW	13.4	39.4	55.0	5.1	1.2	13142.	5.2	73.9	1.6	14.0	59.0	11809.	2280.	0.0	0.	HVC BIT MARGINAL
799	RAW	15.0	39.0	55.0	6.1	1.1	12081.	4.6	69.7	1.5	15.8	59.0	10666.	2100.	0.0	0.	HVC BIT MARGINAL
953	RAW	9.5	41.8	52.0	5.4	1.0	13295.	5.4	77.4	1.7	11.0	56.2	12580.	2535.	1.5	53.	HVC BIT PREMIUM
954	RAW	13.5	41.2	55.1	3.7	0.9	13109.	0.0	0.0	0.0	0.0	57.6	11649.	2110.	0.0	0.	HVC BIT PREMIUM

AVERAGE COALBED ANALYSES FOR STATE: 56 WYOMING

BED	TYPE	*****PROXIMATE*****										*****ULTIMATE*****										AST	AVER FSI	AVER HGI	RANK	GRADE
		MOI	REC	DRY VOL	DRY FIXD	DRY ASH	SUL	DRY BTU	HYD	DRY CAR	NIT	DRY OXY	DNMF FC	NNMF BTU												
COUNTY: 30 TETON																										
799	RAP	8.4		43.0	47.9	8.2	0.5	12844.	5.6	76.6	1.8	12.1	52.6	12741.	2339.	0.0	0.									
COUNTY: 41 Uinta																										
799	RAP	9.3		39.4	46.5	10.1	1.3	11841.	4.6	67.0	1.2	12.9	55.1	12291.	2518.	1.5	50.									
COUNTY: 43 WASHAKIE																										
799	RAP	15.9		44.2	41.3	14.6	0.9	10810.	4.6	60.7	0.9	14.4	49.1	10394.	0.	0.0	0.									
COUNTY: 45 WESTON																										
799	RAP	21.6		41.9	45.5	12.7	2.8	11304.	4.6	64.7	1.0	13.2	53.1	9654.	2508.	0.0	0.									

APPENDIX B.--DEMONSTRATED RESERVE BASE (DRB) OF U.S. COKING COAL
BY STATE, COUNTY, RANK, AND GRADE (MILLION TONS)¹

ALABAMA

County	High volatile			Medium volatile			Low volatile			County totals		
	Premium	Marginal	Latent	Premium	Marginal	Latent	Premium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Bibb.....	181.00	108.00	107.00	-	-	-	-	-	-	396.00	-	289.00
Blount.....	1.88	-	-	-	-	-	-	-	-	1.88	-	1.88
Cullman.....	32.11	-	-	-	-	-	-	-	-	32.11	-	32.11
DeKalb.....	-	-	-	-	-	-	-	-	-	-	-	-
Etowah.....	-	-	-	-	-	-	-	-	-	-	-	-
Fayette.....	-	-	-	-	-	-	-	-	-	-	-	-
Jackson.....	-	-	-	-	-	-	-	-	-	-	-	-
Jefferson...	21.22	188.96	20.02	-	473.86	71.82	-	-	-	775.88	-	684.04
Marion.....	-	110.47	-	-	-	-	-	-	-	110.47	-	110.47
St. Clair...	.60	1.00	.90	-	-	-	-	-	-	2.50	-	1.60
Shelby.....	-	-	-	-	-	-	-	-	-	-	-	-
Tuscaloosa..	-	28.63	85.51	1.00	-	-	-	-	-	115.14	-	29.63
Walker.....	-	25.18	639.96	-	-	-	-	-	-	665.14	-	25.18
Winston.....	-	-	-	-	-	-	-	-	-	-	-	-
Total.....	236.81	462.24	853.39	1.00	473.86	71.82	-	-	-	2,099.12	-	1,173.91

ARKANSAS

County	High volatile			Medium volatile			Low volatile			County totals		
	Premium	Marginal	Latent	Premium	Marginal	Latent	Premium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Crawford....	-	-	-	-	-	-	-	37.70	13.10	-	-	-
Franklin....	-	-	-	-	-	-	-	-	-	50.80	-	37.70
Johnson.....	-	-	-	-	-	-	20.00	-	-	20.00	-	20.00
Logan.....	-	-	-	-	-	-	-	-	10.10	10.10	-	-
Pope.....	-	-	-	-	-	-	-	-	-	-	-	-
Scott.....	-	-	-	-	-	-	-	17.60	-	17.60	-	17.60
Sebastian...	-	-	-	-	-	-	4.50	326.70	-	331.20	-	331.20
Total.....	-	-	-	-	-	-	24.50	382.00	23.20	429.70	-	406.50

¹All dashes shown in appendix B indicate that there is no coking coal reserve base in that category.

COLORADO

County	High volatile		Medium volatile		Low volatile		County totals		
	Premium	Marginal	Latent	Premium	Mar-ginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Archuleta.....	-	-	92.10	-	-	-	92.10	-	-
Boulder.....	-	-	-	-	-	-	-	-	-
Delta.....	58.92	-	-	-	-	-	58.92	-	-
Elbert.....	-	-	-	-	-	-	-	-	-
El Paso.....	-	-	-	-	-	-	-	-	-
Fremont.....	-	157.72	-	-	-	-	157.72	-	157.72
Garfield.....	41.27	52.47	-	-	-	-	93.74	-	93.74
Gunnison.....	217.73	207.58	-	-	-	-	425.31	-	425.31
Huerfano.....	-	69.11	-	-	-	-	106.51	-	69.11
Jackson.....	115.00	-	-	-	-	-	115.00	-	115.00
Jefferson.....	-	-	-	-	-	-	-	-	-
La Plata.....	-	299.52	-	-	-	-	299.52	-	299.52
Las Animas.....	-	61.38	370.77	-	-	-	432.15	-	61.38
Mesa.....	-	188.78	-	-	-	-	188.78	-	188.78
Moffat.....	270.00	-	-	-	-	-	270.00	-	270.00
Montezuma.....	-	19.11	-	-	-	-	19.11	-	19.11
Montrose.....	-	60.00	-	-	-	-	60.00	-	60.00
Park.....	-	-	-	-	-	-	-	-	-
Pitkins.....	16.44	22.83	18.61	-	4.51	-	62.39	-	43.78
Rio Blanco.....	30.00	-	-	-	-	-	30.00	-	30.00
Routt.....	1,276.63	531.04	91.77	-	-	-	1,899.44	-	1,807.67
San Miguel.....	-	-	-	-	-	-	-	-	-
Weld.....	-	-	-	-	-	-	-	-	-
Total.....	2,025.99	1,669.54	610.65	-	4.51	-	4,310.69	-	3,700.04

ILLINOIS

County	High volatile		Medium volatile		Low volatile		County totals		
	Pre-mium	Marginal	Latent	Pre-mium	Mar-ginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Adams.....	-	-	-	-	-	-	-	-	-
Bond.....	-	-	1,752.10	-	-	-	1,752.10	1,752.10	-
Brown.....	-	-	-	-	-	-	-	-	-
Bureau.....	-	-	839.82	-	-	-	839.82	839.82	-
Calhoun....	-	-	6.26	-	-	-	6.26	6.26	-
Cass.....	-	-	-	-	-	-	-	-	-
Christian..	-	-	2,651.30	-	-	-	2,651.30	2,651.30	-
Clark.....	-	-	-	-	-	-	-	-	-
Clinton....	-	-	1,320.34	-	-	-	1,320.34	1,320.34	-
Coles.....	-	-	-	-	-	-	-	-	-
Crawford...	-	-	-	-	-	-	-	-	-
Cumberland.	-	-	-	-	-	-	-	-	-
Douglas....	-	-	390.61	-	-	-	390.61	-	-
Edgar.....	-	-	333.50	-	-	-	333.50	333.50	-
Edwards....	-	-	-	-	-	-	-	-	-
Fayette....	-	-	-	-	-	-	-	-	-
Franklin...	-	1,875.68	-	-	-	-	-	-	1,875.68
Fulton.....	-	-	953.32	-	-	-	1,875.68	-	-
Gallatin...	-	-	698.23	-	-	-	953.32	953.32	-
Greene.....	-	-	-	-	-	-	698.23	698.23	-
Grundv.....	-	-	552.55	-	-	-	-	552.55	-
Hamilton...	-	-	-	-	-	-	552.55	-	-
Hancock....	-	-	-	-	-	-	-	-	-
Henry.....	-	-	350.43	-	-	-	-	-	-
Jackson....	-	82.13	221.24	-	-	-	350.43	350.43	-
Jefferson..	-	1,305.60	-	-	-	-	303.37	221.24	82.13
Jersey.....	-	-	-	-	-	-	1,305.60	-	1,305.60
Kankakee...	-	-	63.05	-	-	-	-	-	-
Knox.....	-	-	387.41	-	-	-	63.05	63.05	-
La Salle...	-	-	1,056.48	-	-	-	387.41	387.41	-
Lawrence...	-	-	-	-	-	-	1,056.48	1,056.48	-
Livingston.	-	-	-	-	-	-	-	-	-
Logan.....	-	-	813.68	-	-	-	813.68	813.68	-
McDonough..	-	-	-	-	-	-	-	-	-
McLean.....	-	-	-	-	-	-	-	-	-
Macon.....	-	-	420.39	-	-	-	420.39	420.39	-

ILLINOIS--Continued

County	High volatile		Medium volatile		Low volatile		County totals		
	Pre-mium	Marginal	Latent	Pre-mium	Mar-ginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Macoupin...	-	-	3,169.62	-	-	-	3,169.62	3,169.62	-
Madison....	-	-	1,875.68	-	-	-	1,875.68	1,875.68	-
Marion.....	-	-	319.35	-	-	-	319.35	319.35	-
Marshall....	-	-	193.64	-	-	-	193.64	193.64	-
Menard.....	-	-	1,460.00	-	-	-	1,460.00	1,460.00	-
Mercer.....	-	-	-	-	-	-	-	-	-
Monroe.....	-	-	-	-	-	-	-	-	-
Montgomery.	-	-	3,424.75	-	-	-	3,424.75	3,424.75	-
Morgan.....	-	-	238.73	-	-	-	238.73	238.73	-
Moultrie....	-	-	-	-	-	-	-	-	-
Peoria.....	-	-	1,673.96	-	-	-	1,673.96	1,673.96	-
Perry.....	-	-	2,174.35	-	-	-	2,174.35	2,174.35	-
Putnam.....	-	-	329.00	-	-	-	329.00	329.00	-
Randolph...	-	-	631.16	-	-	-	631.16	631.16	-
Rock Island	-	-	-	-	-	-	-	-	-
St. Clair..	-	-	2,094.82	-	-	-	2,094.82	2,094.82	-
Saline.....	-	-	2,709.58	-	-	-	2,709.58	1,803.24	-
Sangamon...	-	-	3,514.44	-	-	-	3,514.44	3,514.44	-
Schuyler...	-	-	99.11	-	-	-	99.11	99.11	-
Scott.....	-	-	165.52	-	-	-	165.52	165.52	-
Shelby.....	-	-	53.11	-	-	-	53.11	53.11	-
Stark.....	-	-	234.00	-	-	-	234.00	234.00	-
Tazewell...	-	-	62.35	-	-	-	62.35	62.35	-
Vermillion.	-	-	1,852.90	-	-	-	1,852.90	1,181.91	-
Wabash.....	-	-	-	-	-	-	-	-	-
Warren.....	-	-	-	-	-	-	-	-	-
Washington.	-	-	1,551.06	-	-	-	1,551.06	1,551.06	-
Wayne.....	-	-	-	-	-	-	-	-	-
White.....	-	-	360.64	-	-	-	360.64	360.64	-
Will.....	-	-	15.43	-	-	-	15.43	15.43	-
Williamson..	-	-	883.60	-	-	-	1,548.89	883.00	665.29
Woodford...	-	665.29	-	-	-	-	141.84	-	141.84
Total....	-	4,070.54	41,899.51	-	-	-	45,968.05	40,057.11	4,070.54

INDIANA

County	High volatile			Medium volatile			Low volatile			County totals		
	Premium	Marginal	Latent	Pre-mium	Mar-ginal	Latent	Pre-mium	Mar-ginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Clay.....	-	83.35	133.01	-	-	-	-	-	-	216.36	94.65	83.35
Daviess....	-	-	-	-	-	-	-	-	-	-	-	-
Fountain...	-	-	12.06	-	-	-	-	-	-	12.06	12.06	-
Gibson.....	-	-	1,136.07	-	-	-	-	-	-	1,136.07	883.39	-
Greene.....	-	.19	378.99	-	-	-	-	-	-	379.18	292.52	.19
Knox.....	-	-	1,219.01	-	-	-	-	-	-	1,219.01	1,219.01	-
Martin.....	-	-	-	-	-	-	-	-	-	-	-	-
Owen.....	-	-	22.84	-	-	-	-	-	-	22.84	22.84	-
Parke.....	-	-	-	-	-	-	-	-	-	-	-	-
Perry.....	-	-	-	-	-	-	-	-	-	-	-	-
Pike.....	-	-	377.31	-	-	-	-	-	-	377.31	376.59	-
Posey.....	-	-	-	-	-	-	-	-	-	-	-	-
Spencer....	-	-	9.80	-	-	-	-	-	-	9.80	9.80	-
Sullivan...	-	998.61	648.94	-	-	-	-	-	-	1,647.55	-	998.61
Vanderburgh	-	-	233.80	-	-	-	-	-	-	233.80	233.80	-
Vermillion.	-	107.68	114.19	-	-	-	-	-	-	221.87	114.19	107.68
Vigo.....	-	513.57	780.87	-	-	-	-	-	-	1,294.44	780.87	513.57
Warrick....	-	139.04	677.21	-	-	-	-	-	-	816.25	677.21	139.04
Total...	-	1,842.44	5,744.10	-	-	-	-	-	-	7,586.54	4,716.93	1,842.44

IOWA

County	High volatile			Medium volatile			Low volatile			County totals		
	Pre-mium	Mar-ginal	Latent	Pre-mium	Mar-ginal	Latent	Pre-mium	Mar-ginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Appanoose	-	-	157.43	-	-	-	-	-	-	157.43	157.43	-
Boone....	-	-	-	-	-	-	-	-	-	-	-	-
Cass.....	-	-	-	-	-	-	-	-	-	-	-	-
Dallas...	-	-	4.61	-	-	-	-	-	-	4.61	4.61	-
Davis.....	-	-	1.83	-	-	-	-	-	-	1.83	1.83	-
Decatur..	-	-	-	-	-	-	-	-	-	-	-	-
Greene...	-	-	-	-	-	-	-	-	-	-	-	-
Guthrie..	-	-	-	-	-	-	-	-	-	-	-	-
Hamilton.	-	-	-	-	-	-	-	-	-	-	-	-
Hardin...	-	-	-	-	-	-	-	-	-	-	-	-
Henry.....	-	-	70.28	-	-	-	-	-	-	70.28	70.28	-
Jasper...	-	-	-	-	-	-	-	-	-	-	-	-
Jefferson	-	-	-	-	-	-	-	-	-	-	-	-
Keokuk...	-	-	-	-	-	-	-	-	-	-	-	-
Lee.....	-	-	-	-	-	-	-	-	-	-	-	-
Lucas.....	-	-	115.62	-	-	-	-	-	-	115.62	115.62	-
Mahaska..	-	-	299.06	-	-	-	-	-	-	299.06	299.06	-
Marion...	-	-	373.70	-	-	-	-	-	-	373.70	373.70	-
Marshall.	-	-	-	-	-	-	-	-	-	-	-	-
Monroe...	-	-	509.67	-	-	-	-	-	-	509.67	509.67	-
Muscatine	-	-	-	-	-	-	-	-	-	-	-	-
Polk.....	-	-	41.68	-	-	-	-	-	-	41.68	41.68	-
Scott.....	-	-	-	-	-	-	-	-	-	-	-	-
Story.....	-	-	-	-	-	-	-	-	-	-	-	-
Van Buren	-	-	11.75	-	-	-	-	-	-	11.75	11.75	-
Wapello..	-	-	85.61	-	-	-	-	-	-	85.61	85.61	-
Warren...	-	-	65.59	-	-	-	-	-	-	65.59	65.59	-
Wayne....	-	-	-	-	-	-	-	-	-	-	-	-
Webster..	-	-	-	-	-	-	-	-	-	-	-	-
Total.	-	-	1,736.83	-	-	-	-	-	-	1,736.83	1,736.83	-

KANSAS

County	High volatile			Medium volatile			Low volatile			County totals		
	Premium	Marginal	Latent	Premium	Marginal	Latent	Premium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Atchinson..	-	-	-	-	-	-	-	-	-	-	-	-
Bourbon....	-	-	-	-	-	-	-	-	-	-	-	-
Brown.....	-	-	-	-	-	-	-	-	-	-	-	-
Cherokee....	-	-	187.02	-	-	-	-	-	-	187.02	109.25	-
Cowley.....	-	-	-	-	-	-	-	-	-	-	-	-
Crawford...	-	-	288.18	-	-	-	-	-	-	288.18	176.15	-
Franklin...	-	-	-	-	-	-	-	-	-	-	-	-
Leavenworth	-	-	-	-	-	-	-	-	-	-	-	-
Linn.....	-	-	-	-	-	-	-	-	-	-	-	-
Nemaha.....	-	-	-	-	-	-	-	-	-	-	-	-
Osage.....	-	-	54.19	-	-	-	-	-	-	54.19	54.19	-
Total....	-	-	529.39	-	-	-	-	-	-	529.39	339.59	-

KENTUCKY (WEST)

County	High volatile			Medium volatile			Low volatile			County totals		
	Premium	Marginal	Latent	Premium	Marginal	Latent	Premium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Butler.....	-	-	-	-	-	-	-	-	-	-	-	-
Christian...	-	-	-	-	-	-	-	-	-	-	-	-
Crittendon..	-	-	-	-	-	-	-	-	-	-	-	-
Daviess....	-	-	114.13	-	-	-	-	-	-	114.13	114.13	-
Edmonson...	-	-	-	-	-	-	-	-	-	-	-	-
Grayson....	-	-	-	-	-	-	-	-	-	-	-	-
Hancock....	-	-	-	-	-	-	-	-	-	-	-	-
Henderson...	-	-	-	-	-	-	-	-	-	-	-	-
Hopkins....	-	-	2,022.08	-	-	-	-	-	-	2,022.08	2,003.57	-
McClean....	-	-	-	-	-	-	-	-	-	-	-	-
Muhlenberg.	-	-	1,889.71	-	-	-	-	-	-	1,889.71	1,849.71	-
Ohio.....	-	-	515.36	-	-	-	-	-	-	515.36	501.37	-
Union.....	-	-	1,681.64	-	-	-	-	-	-	1,681.64	1,681.64	-
Warren.....	-	-	-	-	-	-	-	-	-	-	-	-
Webster....	-	-	1,236.87	-	-	-	-	-	-	1,236.87	1,236.87	-
Total....	-	-	7,459.79	-	-	-	-	-	-	7,459.79	7,387.29	-

KENTUCKY (EAST)

County	High volatile			Medium volatile			Low volatile			County totals		
	Premium	Marginal	Latent	Pre-mium	Mar-ginal	Latent	Pre-mium	Mar-ginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Bell.....	108.54	26.93	11.25	-	-	-	-	-	-	146.82	10.32	135.57
Boyd.....	-	-	-	-	-	-	-	-	-	-	-	-
Breathitt..	14.23	225.91	76.68	-	-	-	-	-	-	316.82	-	240.14
Carter.....	-	29.46	-	-	-	-	-	-	-	29.46	-	29.46
Clay.....	42.25	77.23	-	-	-	-	-	-	-	119.48	-	119.48
Clinton...	-	-	-	-	-	-	-	-	-	-	-	-
Elliott...	-	-	-	-	-	-	-	-	-	-	-	-
Floyd.....	709.32	249.01	-	-	-	-	-	-	-	958.33	-	958.33
Greenup...	-	-	-	-	-	-	-	-	-	-	-	-
Harlan.....	1,103.31	-	-	-	-	-	-	-	-	1,103.31	-	1,103.31
Jackson...	-	51.20	-	-	-	-	-	-	-	51.20	-	51.20
Johnson...	-	103.73	-	-	-	-	-	-	-	103.73	-	103.73
Knott.....	747.32	344.60	50.46	-	-	-	-	-	-	1,142.38	-	1,091.92
Knox.....	-	43.57	17.78	-	-	-	-	-	-	61.35	-	43.57
Laurel.....	-	-	23.04	-	-	-	-	-	-	23.04	18.84	-
Lawrence..	-	-	-	-	-	-	-	-	-	-	-	-
Leslie.....	-	-	-	-	-	-	-	-	-	-	-	-
Letcher...	366.85	309.65	88.29	-	-	-	-	-	-	764.79	88.29	676.50
McCreary..	-	.40	184.27	-	-	-	-	-	-	184.67	104.81	.40
Magoffin..	67.66	3.05	-	-	-	-	-	-	-	70.71	-	70.71
Martin....	-	25.29	-	-	-	-	-	-	-	25.29	-	25.29
Menifee...	-	-	-	-	-	-	-	-	-	-	-	-
Morgan....	-	-	-	-	-	-	-	-	-	-	-	-
Owsley....	-	-	-	-	-	-	-	-	-	-	-	-
Perry.....	643.06	127.50	54.15	-	-	-	-	-	-	824.71	-	770.56
Pike.....	560.55	1,382.35	73.02	-	-	-	-	-	-	2,015.92	-	1,942.90
Powell....	-	-	-	-	-	-	-	-	-	-	-	-
Pulaski...	-	7.27	-	-	-	-	-	-	-	7.27	-	7.27
Rockcastle	-	-	-	-	-	-	-	-	-	-	-	-
Wayne.....	-	-	-	-	-	-	-	-	-	-	-	-
Whitley...	-	-	-	-	-	-	-	-	-	-	-	-
Whitley...	-	40.53	10.30	-	-	-	-	-	-	50.83	-	40.53
Wolfe.....	-	-	-	-	-	-	-	-	-	-	-	-
Total..	4,363.19	3,047.68	589.24	-	-	-	-	-	-	8,000.11	222.26	7,410.87

MARYLAND

County	High volatile			Medium volatile			Low volatile			County totals			
	Pre-mium	Mar-ginal	Latent	Pre-mium	Mar-ginal	Latent	Pre-mium	Mar-ginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB	
Allegany	-	-	-	-	-	-	-	12.67	311.29	323.96	-	12.67	
Garrett.	-	-	-	-	-	-	0.49	347.07	246.64	594.20	68.28	347.56	
Total	-	-	-	-	-	-	.49	359.74	557.93	918.16	68.28	360.23	

MICHIGAN

County	High volatile			Medium volatile			Low volatile			County totals			
	Pre-mium	Mar-ginal	Latent	Pre-mium	Mar-ginal	Latent	Pre-mium	Mar-ginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB	
Bay.....	-	55.57	-	-	-	-	-	-	-	55.57	-	55.57	
Genesee....	-	-	-	-	-	-	-	-	-	-	-	-	
Huron.....	-	-	6.46	-	-	-	-	-	-	6.46	6.46	-	
Midland....	-	-	-	-	-	-	-	-	-	-	-	-	
Saginaw....	-	27.04	-	-	-	-	-	-	-	27.04	-	27.04	
Shiawassee.	-	-	2.36	-	-	-	-	-	-	2.36	-	-	
Tuscola....	-	-	19.74	-	-	-	-	-	-	19.74	19.74	-	
Total....	-	82.61	28.56	-	-	-	-	-	-	111.17	26.20	82.61	

MISSOURI

County	High volatile			Medium volatile			Low volatile			County totals		
	Premium	Marginal	Latent	Premium	Marginal	Latent	Premium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Adair.....	-	-	447.48	-	-	-	-	-	-	447.48	447.48	-
Audrian.....	-	-	-	-	-	-	-	-	-	-	-	-
Barton.....	-	-	156.39	-	-	-	-	-	-	156.39	156.39	-
Bates.....	-	-	389.07	-	-	-	-	-	-	389.07	389.07	-
Boone.....	-	-	260.96	-	-	-	-	-	-	260.96	260.96	-
Caldwell...	-	-	-	-	-	-	-	-	-	-	-	-
Calloway...	-	-	296.68	-	-	-	-	-	-	296.68	296.68	-
Carroll.....	-	-	-	-	-	-	-	-	-	-	-	-
Cass.....	-	-	-	-	-	-	-	-	-	-	-	-
Cedar.....	-	-	-	-	-	-	-	-	-	-	-	-
Chariton...	-	-	-	-	-	-	-	-	-	-	-	-
Clay.....	-	-	32.42	-	-	-	-	-	-	32.42	32.42	-
Dade.....	-	-	-	-	-	-	-	-	-	-	-	-
Davies.....	-	-	74.02	-	-	-	-	-	-	74.02	74.02	-
Grundy.....	-	-	-	-	-	-	-	-	-	-	-	-
Harrison...	-	-	-	-	-	-	-	-	-	-	-	-
Henry.....	-	-	19.75	-	-	-	-	-	-	19.75	19.75	-
Howard.....	-	-	-	-	-	-	-	-	-	-	-	-
Jasper.....	-	-	-	-	-	-	-	-	-	-	-	-
Johnson....	-	-	118.45	-	-	-	-	-	-	118.45	118.45	-
Lafayette..	-	-	59.63	-	-	-	-	-	-	59.63	59.63	-
Lynn.....	-	-	-	-	-	-	-	-	-	-	-	-
Livingston.	-	-	497.61	-	-	-	-	-	-	497.61	497.61	-
Macon.....	-	-	-	-	-	-	-	-	-	-	-	-
Mercer.....	-	-	-	-	-	-	-	-	-	-	-	-
Monroe.....	-	-	-	-	-	-	-	-	-	-	-	-
Montgomery.	-	-	-	-	-	-	-	-	-	-	-	-
Nodaway....	-	-	-	-	-	-	-	-	-	-	-	-
Pettis.....	-	-	-	-	-	-	-	-	-	-	-	-
Putnam.....	-	-	-	-	-	-	-	-	-	-	-	-
Ralls.....	-	-	-	-	-	-	-	-	-	-	-	-
Randolph...	-	-	851.64	-	-	-	-	-	-	851.64	851.64	-
Ray.....	-	-	126.72	-	-	-	-	-	-	126.72	126.72	-
St. Clair..	-	-	8.25	-	-	-	-	-	-	8.25	8.25	-
Saline.....	-	-	-	-	-	-	-	-	-	-	-	-
Schuyler...	-	-	-	-	-	-	-	-	-	-	-	-
Sullivan...	-	-	-	-	-	-	-	-	-	-	-	-
Vernon.....	-	-	317.63	-	-	-	-	-	-	317.63	317.63	-
Worth.....	-	-	-	-	-	-	-	-	-	-	-	-
Total...	-	-	3,656.70	-	-	-	-	-	-	3,656.70	3,656.70	-

MONTANA

County	High volatile			Medium volatile			Low volatile			County totals		
	Premium	Marginal	Latent	Premium	Marginal	Latent	Premium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Big Horn....	-	-	-	-	-	-	-	-	-	-	-	-
Blaine.....	-	-	-	-	-	-	-	-	-	-	-	-
Broadwater..	-	-	-	-	-	-	-	-	-	-	-	-
Carbon.....	-	-	735.08	-	-	-	-	-	-	735.08	-	-
Cascade.....	-	-	308.82	-	-	-	-	-	-	308.82	308.82	-
Chouteau....	-	-	-	-	-	-	-	-	-	-	-	-
Custer.....	-	-	-	-	-	-	-	-	-	-	-	-
Fergus.....	-	-	210.13	-	-	-	-	-	-	210.13	-	-
Flathead....	-	-	-	-	-	-	-	-	-	-	-	-
Glacier.....	-	-	-	-	-	-	-	-	-	-	-	-
Hill.....	-	-	-	-	-	-	-	-	-	-	-	-
Judith Basin	-	-	-	-	-	-	-	-	-	-	-	-
Meagher.....	-	-	-	-	-	-	-	-	-	-	-	-
Musselshell.	-	-	-	-	-	-	-	-	-	-	-	-
Powder River	-	-	-	-	-	-	-	-	-	-	-	-
Prairie.....	-	-	-	-	-	-	-	-	-	-	-	-
Richland....	-	-	-	-	-	-	-	-	-	-	-	-
Rosebud....	-	-	-	-	-	-	-	-	-	-	-	-
Sheridan....	-	-	-	-	-	-	-	-	-	-	-	-
Stillwater..	-	-	-	-	-	-	-	-	-	-	-	-
Total.....	-	-	1,254.03	-	-	-	-	-	-	1,254.03	308.82	-

NEW MEXICO

County	High volatile			Medium volatile			Low volatile			County totals		
	Premium	Marginal	Latent	Premium	Marginal	Latent	Premium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Bernalillo	-	-	-	-	-	-	-	-	-	-	-	-
Colfax....	-	1,381.00	-	-	-	-	-	-	-	1,381.00	-	1,381.00
Lincoln....	-	-	6.90	-	-	-	-	-	-	6.90	-	-
McKinley..	-	250.00	-	-	-	-	-	-	-	250.00	-	250.00
Rio Arriba	-	4.50	-	-	-	-	-	-	-	4.50	-	4.50
Sandoval..	-	3.50	-	-	-	-	-	-	-	3.50	-	3.50
San Juan..	-	94.70	-	-	-	-	-	-	-	94.70	-	94.70
Santa Fe..	-	-	-	-	-	-	-	9.10	-	9.10	-	9.10
Socorro...	-	27.50	-	-	-	-	-	-	-	27.50	-	27.50
Valencia..	-	-	-	-	-	-	-	-	-	-	-	-
Total...	-	1,761.20	6.90	-	-	-	-	9.10	-	1,777.20	-	1,770.30

OHIO

County	High volatile			Medium volatile			Low volatile			County totals		
	Pre-mium	Marginal	Latent	Pre-mium	Mar-ginal	Latent	Pre-mium	Mar-ginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Athens....	-	1,009.89	452.09	-	-	-	-	-	-	1,461.98	452.09	1,009.89
Belmont...	-	-	3,804.68	-	-	-	-	-	-	3,804.68	3,804.68	-
Carroll....	-	-	840.04	-	-	-	-	-	-	840.04	554.41	-
Colombiana	-	-	876.07	-	-	-	-	-	-	876.07	164.63	-
Coshocton.	-	-	354.88	-	-	-	-	-	-	354.88	354.88	-
Gallia....	-	-	335.32	-	-	-	-	-	-	335.32	335.32	-
Guernsey..	-	-	682.52	-	-	-	-	-	-	682.52	58.92	-
Harrison..	-	-	1,182.97	-	-	-	-	-	-	1,182.97	412.98	-
Hocking...	-	-	199.04	-	-	-	-	-	-	199.04	-	-
Holmes....	-	-	7.55	-	-	-	-	-	-	7.55	7.55	-
Jackson...	-	-	333.67	-	-	-	-	-	-	333.67	206.58	-
Jefferson.	-	-	1,467.40	-	-	-	-	-	-	1,467.40	1,365.17	-
Lawrence..	-	-	332.03	-	-	-	-	-	-	332.03	138.29	-
Mahoning..	-	-	342.19	-	-	-	-	-	-	342.19	342.19	-
Meigs.....	-	-	485.09	-	-	-	-	-	-	485.09	485.09	-
Monroe....	-	-	-	-	-	-	-	-	-	-	-	-
Morgan....	-	-	483.33	-	-	-	-	-	-	483.33	274.14	-
Muskingum.	-	-	743.13	-	-	-	-	-	-	743.13	743.13	-
Noble.....	-	-	878.56	-	-	-	-	-	-	878.56	703.31	-
Perry.....	-	-	910.94	-	-	-	-	-	-	910.94	122.82	-
Portage...	-	-	-	-	-	-	-	-	-	-	-	-
Scioto....	-	-	-	-	-	-	-	-	-	-	-	-
Stark.....	-	-	505.16	-	-	-	-	-	-	505.16	505.16	-
Tuscarawas	-	-	970.80	-	-	-	-	-	-	970.80	970.80	-
Vinton....	-	-	340.42	-	-	-	-	-	-	340.42	228.30	-
Washington	-	-	215.01	-	-	-	-	-	-	215.01	215.01	-
Wayne.....	-	-	-	-	-	-	-	-	-	-	-	-
Total..	-	1,009.89	16,742.89	-	-	-	-	-	-	17,752.78	12,445.45	1,009.89

OKLAHOMA

County	High volatile			Medium volatile			Low volatile			County totals			
	Premium	Marginal	Latent	Premium	Mar- ginal	Latent	Pre- mium	Mar- ginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB	
Atoka....	-	-	-	-	-	-	-	-	-	-	-	-	
Coal.....	-	-	54.25	-	-	-	-	-	-	54.25	-	-	
Craig.....	-	34.58	156.34	-	-	-	-	-	-	190.92	156.34	34.58	
Haskell..	-	-	-	5.60	41.54	84.11	-	-	-	131.25	-	47.14	
Latimer..	-	20.38	59.96	-	-	-	-	-	-	80.34	-	20.38	
LeFlore..	-	-	-	-	-	3.79	-	61.26	-	65.05	-	61.26	
McIntosh.	-	-	-	-	-	-	-	-	-	-	-	-	
Muskogee.	-	-	-	-	-	3.32	-	-	-	3.32	3.32	-	
Nowata...	-	-	-	-	-	-	-	-	-	-	-	-	
Okfuskee.	-	-	-	-	-	-	-	-	-	-	-	-	
Okmulgee.	-	-	119.79	-	-	-	-	-	-	119.79	-	-	
Pittsburg	-	67.44	49.76	-	-	-	-	-	-	117.20	-	67.44	
Rogers...	42.13	-	7.99	-	-	-	-	-	-	50.12	7.99	42.13	
Sequoyah.	-	-	-	8.21	-	-	-	-	-	8.21	-	8.21	
Tulsa....	-	-	9.63	-	-	-	-	-	-	9.63	9.63	-	
Wagoner..	4.13	-	-	-	-	-	-	-	-	4.13	-	4.13	
Total.	46.26	122.40	457.72	13.81	41.54	91.22	-	61.26	-	834.21	177.28	285.27	

PENNSYLVANIA

County	High volatile			Medium volatile			Low volatile			County totals		
	Premium	Marginal	Latent	Pre-mium	Marginal	Latent	Pre-mium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Allegheny...	425.46	447.30	-	-	-	-	-	-	-	872.76	-	872.76
Armstrong...	-	9.87	1,122.21	-	-	-	-	-	-	1,132.08	499.55	9.87
Beaver.....	-	50.65	379.16	-	-	-	-	-	-	429.81	-	50.65
Bedford.....	-	-	-	-	-	-	-	27.55	62.50	90.05	-	27.55
Blair.....	-	-	.40	-	1.94	15.21	-	-	-	17.55	15.21	1.94
Bradford.....	-	-	-	-	-	-	-	-	-	-	-	-
Butler.....	-	-	1,017.97	-	-	-	-	-	-	1,017.97	165.31	-
Cambria.....	-	-	-	-	274.64	498.82	-	377.67	366.48	1,517.61	1.31	652.31
Cameron.....	-	-	-	-	-	-	-	-	-	-	-	-
Centre.....	-	-	-	-	82.66	143.43	-	-	-	226.09	-	82.66
Clarion.....	-	19.05	647.65	-	-	-	-	-	-	666.70	386.44	19.05
Clearfield..	-	-	-	-	394.60	706.60	-	-	-	1,101.20	-	394.60
Clinton.....	-	-	-	-	-	17.45	-	-	-	17.45	-	-
Elk.....	-	-	11.05	-	2.54	-	-	-	-	13.59	-	2.54
Fayette.....	-	221.72	352.26	-	-	259.12	-	-	-	833.10	76.21	221.72
Fulton.....	-	-	-	-	-	-	-	-	-	-	-	-
Greene.....	-	-	5,585.90	-	-	-	-	-	-	5,585.90	-	-
Huntingdon..	-	-	-	-	-	-	-	24.48	-	24.48	-	24.48
Indiana.....	-	-	4.67	-	438.31	1,277.82	-	-	-	1,720.80	-	438.31
Jefferson...	11.28	277.57	74.43	-	7.27	-	-	-	-	370.55	-	296.12
Lawrence....	-	-	86.60	-	-	-	-	-	-	86.60	79.74	-
Lycoming....	-	-	-	-	-	-	-	-	-	-	-	-
McKean.....	-	-	79.25	-	-	-	-	-	-	79.25	79.25	-
Mercer.....	-	-	56.45	-	-	-	-	-	-	56.45	56.45	-
Somerset....	-	-	-	-	6.18	-	-	351.78	884.54	1,242.50	-	357.96
Tioga.....	-	-	-	-	-	23.60	-	-	2.25	25.85	11.90	-
Venango.....	-	-	37.99	-	-	-	-	-	-	37.99	37.99	-
Washington..	-	-	3,352.32	-	-	-	-	-	-	3,352.32	334.68	-
Westmoreland	-	97.78	608.36	-	-	1.39	-	-	-	707.53	-	97.78
Total.....	436.74	1,123.94	13,416.67	-	1,208.14	2,943.44	-	781.48	1,315.77	21,226.18	1,744.04	3,550.30

TENNESSEE

County	High volatile			Medium volatile			Low volatile			County totals		
	Premium	Marginal	Latent	Pre-mium	Marginal	Latent	Pre-mium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Anderson..	41.66	29.50	54.15	-	-	-	-	-	-	125.31	24.74	71.16
Bledsoe...	-	-	14.78	-	-	-	-	-	-	14.78	-	-
Campbell..	97.71	59.04	86.67	-	-	-	-	-	-	243.42	4.26	156.75
Claiborne.	3.02	8.57	7.36	-	-	-	-	-	-	18.95	-	11.59
Cumberland	-	-	23.44	-	-	-	-	-	-	23.44	-	-
Fentress...	8.33	-	37.50	-	-	-	-	-	-	45.83	-	8.33
Grundy.....	-	9.47	-	-	-	-	-	-	-	9.47	-	9.47
Hamilton...	-	14.96	43.40	-	-	-	-	-	-	58.36	-	14.96
Marion.....	-	42.11	2.59	-	-	-	-	-	-	44.70	-	42.11
Morgan.....	14.50	9.37	55.62	-	-	-	-	-	-	79.49	-	23.87
Overton....	-	-	11.45	-	-	-	-	-	-	11.45	11.45	-
Pickett....	-	-	-	-	-	-	-	-	-	-	-	-
Putnam.....	-	-	21.95	-	-	-	-	-	-	21.95	21.95	-
Rhea.....	-	-	6.05	-	-	-	-	-	-	6.05	-	-
Roane.....	-	1.34	-	-	-	-	-	-	-	1.34	-	1.34
Scott.....	-	38.68	32.44	-	-	-	-	-	-	71.12	28.38	38.68
Sequatchie	-	61.29	-	-	-	-	-	-	-	61.29	-	61.29
Van Buren.	-	-	6.55	-	-	-	-	-	-	6.55	-	-
White.....	-	-	2.75	-	-	-	-	-	-	2.75	2.75	-
Total..	165.22	274.70	406.70	-	-	-	-	-	-	846.25	68.79	439.55

UTAH

County	High volatile			Medium volatile			Low volatile			County totals			
	Premium	Marginal	Latent	Pre-mium	Marginal	Latent	Pre-mium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB	
Carbon..	766.70	-	-	-	-	-	-	-	-	766.70	-	766.70	
Emery...	15.54	-	-	-	-	-	-	-	-	15.54	-	15.54	
Garfield	-	29.67	-	-	-	-	-	-	-	29.67	-	29.67	
Grand...	-	-	-	-	-	-	-	-	-	-	-	-	
Iron....	-	-	-	-	-	-	-	-	-	-	-	-	
Kane.....	-	-	200.00	-	-	-	-	-	-	200.00	-	-	
Sevier..	-	-	10.00	-	-	-	-	-	-	10.00	-	-	
Summit..	-	-	-	-	-	-	-	-	-	-	-	-	
Uintah..	-	-	-	-	-	-	-	-	-	-	-	-	
Wayne...	-	-	-	-	-	-	-	-	-	-	-	-	
Total	782.24	29.67	210.00	-	-	-	-	-	-	1,021.91	-	811.91	

VIRGINIA

County	High volatile			Medium volatile			Low volatile			County totals			
	Premium	Marginal	Latent	Premium	Marginal	Latent	Pre-mium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB	
Buchanan.	188.42	114.37	-	313.85	401.05	-	-	-	-	1,017.69	-	1,017.69	
Dickenson	162.92	91.43	0.98	-	-	-	-	-	-	255.33	-	254.35	
Lee.....	28.67	52.49	106.53	-	-	-	-	-	-	187.69	-	81.16	
Russel...	256.13	-	187.06	-	-	-	-	-	-	443.19	-	256.13	
Tazewell.	-	-	-	61.51	33.17	47.30	-	-	-	141.98	-	94.68	
Wise.....	344.11	336.08	121.65	-	-	-	-	-	-	801.84	-	680.19	
Total.	980.25	594.37	416.22	375.36	434.22	47.30	-	-	-	2,847.72	-	2,384.20	

WEST VIRGINIA

County	High volatile			Medium volatile			Low volatile			County totals		
	Premium	Marginal	Latent	Premium	Marginal	Latent	Premium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB
Barbour.....	-	-	490.31	-	-	-	-	-	-	490.31	132.87	-
Boone.....	454.91	1,435.64	340.97	-	-	-	-	-	-	2,231.52	-	1,890.55
Braxton.....	-	-	106.29	-	-	-	-	-	-	106.29	-	-
Brooke.....	-	-	151.75	-	-	-	-	-	-	151.75	-	-
Cabell.....	-	-	-	-	-	-	-	-	-	-	-	-
Calhoun.....	-	-	-	-	-	-	-	-	-	-	-	-
Clay.....	-	401.17	124.90	-	-	-	-	-	-	526.07	-	401.17
Doddridge.....	-	-	-	-	-	-	-	-	-	-	-	-
Fayette.....	601.03	31.85	2.10	196.19	-	-	86.70	31.00	-	948.87	-	946.77
Gilmer.....	-	-	169.48	-	-	-	-	-	-	169.48	-	-
Grant.....	-	-	-	-	-	-	-	79.51	247.70	327.21	-	79.51
Greenbrier.....	-	-	-	111.39	165.34	-	-	-	-	276.73	-	276.73
Hancock.....	-	-	120.73	-	-	-	-	-	-	120.73	101.04	-
Harrison.....	-	-	403.01	-	-	-	-	-	-	403.01	386.14	-
Kanawha.....	582.39	582.40	158.97	-	-	-	-	-	-	1,323.76	-	1,164.79
Lewis.....	-	-	592.04	-	-	-	-	-	-	592.04	546.60	-
Lincoln.....	-	-	-	-	-	-	-	-	-	-	-	-
Logan.....	1,405.59	1,440.59	178.35	-	-	-	-	-	-	3,024.53	-	2,846.18
McDowell.....	-	-	-	80.98	16.14	-	818.24	154.52	-	1,127.14	-	1,127.14
Marion.....	-	1,047.12	1,010.81	-	-	-	-	-	-	2,057.93	1,010.81	1,047.12
Marshall.....	-	-	1,925.65	-	-	-	-	-	-	1,925.65	1,925.65	-
Mason.....	-	-	117.87	-	-	-	-	-	-	117.87	117.87	-
Mercer.....	-	-	-	-	-	-	46.45	-	-	46.45	-	46.45
Mineral.....	-	-	-	-	-	-	-	-	-	176.68	68.26	15.08
Mingo.....	823.24	946.13	-	-	-	-	-	-	-	1,769.37	-	1,769.37
Monongalia.....	-	150.43	2,900.27	-	-	-	-	-	-	3,050.70	-	150.43
Nicholas.....	662.94	286.03	105.73	245.06	-	-	-	-	-	1,299.76	-	1,194.03
Ohio.....	-	-	287.69	-	-	-	-	-	-	287.69	287.69	-
Pocahontas.....	87.80	-	-	-	-	-	-	-	-	87.80	-	87.80
Preston.....	-	6.84	452.88	-	-	246.46	-	-	-	706.12	-	6.84
Putnam.....	-	-	146.57	-	-	-	-	-	-	146.57	-	-
Raleigh.....	243.86	123.14	-	242.46	-	-	912.86	-	-	1,522.32	-	1,522.32
Randolph.....	79.94	67.34	9.55	337.96	-	-	-	-	-	494.79	-	485.24
Roane.....	-	-	-	-	-	-	-	-	-	-	-	-
Summers.....	-	-	-	-	-	-	-	-	-	-	-	-
Taylor.....	-	-	40.04	-	-	-	-	-	-	40.04	-	-
Tucker.....	-	-	-	-	98.63	-	-	-	-	98.63	-	98.63
Tyler.....	-	-	-	-	-	-	-	-	-	-	-	-
Upshur.....	-	67.36	109.45	-	-	-	-	-	-	176.81	16.80	67.36
Wayne.....	-	-	-	-	-	-	-	-	-	-	-	-
Webster.....	203.89	-	-	-	-	34.52	-	-	-	238.41	-	203.89
Wetzel.....	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming.....	181.08	.61	16.26	100.57	38.87	54.26	949.38	208.03	-	1,600.06	-	1,529.54
Total.....	5,326.67	6,643.91	9,961.67	1,365.61	318.98	335.24	2,813.63	488.14	409.30	27,663.15	4,593.73	16,956.94

WASHINGTON

County	High volatile			Medium volatile			Low volatile			County totals			
	Pre-mium	Marginal	Latent	Pre-mium	Marginal	Latent	Pre-mium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB	
King.....	7.90	1.64	10.65	-	-	-	-	-	-	20.19	-	9.54	
Kittitas	-	-	64.39	-	-	-	-	-	-	64.39	-	-	
Lewis....	-	-	1.61	-	-	-	-	-	-	1.61	-	-	
Pierce...	-	-	12.52	-	1.64	3.34	-	-	-	17.50	-	1.64	
Whatcom.	-	-	33.96	-	-	-	-	-	-	33.96	-	-	
Total	7.90	1.64	123.13	-	1.64	3.34	-	-	-	137.65	-	11.18	

WYOMING

County	High volatile			Medium volatile			Low volatile			County totals			
	Pre-mium	Marginal	Latent	Pre-mium	Marginal	Latent	Pre-mium	Marginal	Latent	Coking coal DRB	Sulfur >3.0% DRB	Premium + marginal DRB	
Carbon.....	-	39.21	-	-	-	-	-	-	-	39.21	-	39.21	
Lincoln.....	-	555.89	-	-	-	-	-	-	-	555.89	-	555.89	
Hot Springs	-	-	-	-	-	-	-	-	-	-	-	-	
Park.....	-	8.26	-	-	-	-	-	-	-	8.26	-	8.26	
Sweetwater.	-	3,402.80	-	-	-	-	-	-	-	3,402.80	-	3,402.80	
Teton.....	-	-	-	-	-	-	-	-	-	-	-	-	
Uinta.....	-	-	494.70	-	-	-	-	-	-	494.70	-	-	
Total.	-	4,006.16	494.70	-	-	-	-	-	-	4,500.86	-	4,006.16	

APPENDIX C.--COALBED CODE NUMBERS

ALABAMA

001	Various	279	Mary Lee
182	Lower Maylene	280	Blue Creek
194	Montevallo	281	Jagger
198	Brookwood	296	Harkness
199	Milldale	298	Jefferson
200	Johnson	299	Black Creek
201	Clements	313	Bragg
202	Yeshic	314	Nunnally Coal Zone
204	Helena	315	Glass
207	Gwin	326	Nelson
218	Cobb (Upper and Lower Cobb)	336	Gould
220	Lower Thompson	338	Swansea
223	Gholson	364	Underwood
225	Clark	970	American and Mary Lee
227	Pratt	975	American and Pratt
228	Fire Clay	977	Black Creek and Jefferson
229	American	979	Brookwood and Harkness
236	Bynum	980	Brookwood and Carter
239	Youngblood	981	Brookwood and Milldale
240	Buck	982	Clark and Gholson
242	Coal City	984	Mary Lee and Pratt
247	Broken Arrow	985	Woodstock and Youngblood
277	Wadsworth	986	Woodstock and Thompson
278	New Castle		

ALASKA

001	Various	799	Uncorrelated
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ARKANSAS

551	Paris	563	Lower Hartshorne
554	Charleston	799	Uncorrelated
562	Upper Hartshorne		

COLORADO

001	Various	718	Anderson
002	Various	719	Upper Ludlow
516	Allen	722	Upper Rugby
704	A (Carbondale Field)	724	Rapson
705	B (Carbondale Field)	725	Walsen
709	Hastings	727	Palisade
711	Lower Starkville	729	Frederick
712	Nonac	730	Lower Robinson
715	Wheeler	732	Magnet
717	Morley	733	Fox Hill

COLORADO--Continued

735	Cass	759	Allen
736	Zenith	760	Lennox
738	Wolf Creek	762	Dry Creek
739	Delagua No. 1	763	Cameron
741	Majestic	764	Bear Canyon No. 6
742	Lower Ludlow	765	Jack-O-Lantern
744	Chandler	767	Radiant
745	Dirty Robinson	768	Laramie No. 3
747	Empire	769	Collom
748	Pinnacle	770	Cameo
749	Rockdale	799	Uncorrelated
750	Wadge	970	Upper and Lower Ludlow
751	Primero	971	Jack-O-Lantern and Monarch
753	B	974	A and Anderson (Carbondale Field)
754	Bear	975	A and B (Carbondale Field)
755	D	978	B and C (Grand Mesa and Somerset Fields)
756	E		
758	Brookside		

GEORGIA

258	A	335	Rattlesnake
263	Durham	365	Upper Sailcreek
267	No. 4	799	Uncorrelated
272	No. 5	941	Durham and A
320	Aetna	942	Durham and No. 4
327	Bluff		

IDAHO

608	Brown Bear	799	Uncorrelated
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ILLINOIS

001	Various	529	No. 1
480	No. 7	900	Nos. 5 and 6
484	No. 6	901	Davis and Dekoven
489	No. 5	908	Nos. 2 and 3
496	No. 2	910	Nos. 2 and 5
506	Davis		

INDIANA

001	Various	529	Minshall
480	No. VII	537	Upper Block Zone
483	No. VI	545	Lower Block Zone
489	No. V	799	Uncorrelated
490	No. IV-A	990	Nos. III and IV
493	No. IV	992	Nos. IV and V
502	No. III		

IOWA

442	Nodaway	539	Cliffland
484	Mystic	548	Manbeck
517	Lucas County No. 5	550	Hastie
530	Ford	799	Uncorrelated

KANSAS

001	Various	513	Weir-Pittsburg
442	Nodaway	904	Fleming and Mineral
492	Bevier	906	Weir-Pittsburg and Rowe
499	Fleming	909	Weir-Pittsburg and Columbus
504	Mineral	940	Bevier and Croweburg

KENTUCKY (EAST)

001	Various	863	High Splint and Lower Hignite
096	Hindman	871	Nos. 1 and 1-1/2
104	Hazard No. 7	872	Hazard No. 4 and Whitesburg
111	Hazard	874	Hazard No. 4 and Hindman
121	Haddix	877	Hazard No. 7 and Hindman
126	Upper Hamlin	878	Elkhorn Nos. 1 and 3
134	Fire Clay Rider	892	Lower Hignite and Mason
135	Hazard No. 4	893	Lower Hignite and Sterling
137	Whitesburg	895	Alma and No. 2 Gas
142	Upper Mason	901	Elkhorn No. 2 and Hazard No. 4
151	Darby No. 5	907	Hazard Nos. 4 and 5-A
152	Kellioka	908	Hance and Mason
154	Upper Elkhorn No. 2	909	Hazard Nos. 5 and 5-A
157	Upper Elkhorn No. 1	910	Sterling and Jellico
168	Lower Elkhorn	911	Hazard Nos. 4 and 4-A
174	Bingham	913	Elkhorn Nos. 2 and 3
196	Auxier	930	Elkhorn No. 3 and Lower Elkhorn
212	Lily	935	Elkhorn No. 3 and Whitesburg
233	Elswick	936	Elkhorn No. 3 and Elkhorn Rider
287	Barren Fork	939	Elkhorn Nos. 1 and 2
294	Beaver Creek	941	Hazard Nos. 4 and 7
303	Stearns No. 1-1/2	942	Hazard Nos. 5-A and 7
322	Hudson	945	High and Low Splint
799	Uncorrelated	951	Hazard No. 4 and Horse Creek
858	Hazard No. 4 and Hazard No. 4 Rider	956	Chilton and Cedar Grove
		983	Clintwood and Lower Elkhorn

KENTUCKY (WEST)

001	Various	487	No. 10
480	No. 14	489	No. 9
482	No. 13	506	No. 6
483	No. 12	799	Uncorrelated
484	No. 11	900	Nos. 9 and 11

KENTUCKY (WEST)--Continued

902 Nos. 6 and 9

907 No. 9 and No. 11

905 Nos. 11 and 12

MARYLAND

001 Various

071 Upper Freeport

023 Waynesburg

074 Lower Freeport

029 Sewickley

076 Upper Kittanning

033 Redstone (Upper and Lower
Benches)

084 Lower Kittanning

036 Pittsburgh

087 Clarion

038 Little Pittsburgh

799 Uncorrelated

042 Franklin

924 Lower and Upper Kittanning

055 Barton

927 Lower Kittanning and Upper
Freeport

060 Harlem

949 Pittsburgh and Sewickley

062 Upper Bakerstown

950 Lower Bakerstown and Upper
Freeport

063 Lower Bakerstown

MICHIGAN

538 Upper Verne

565 Saginaw

799 Uncorrelated

MISSOURI

001 Various

509 Tebo

482 Mulberry

513 Weir-Pittsburg

484 Lexington

540 Knifeton

490 Mulky

545 Rowe

492 Bevier

799 Uncorrelated

496 Croweburg

903 Bevier and Mulky

499 Fleming

925 Knifeton and Rowe

504 Mineral

979 Bevier and Tebo

MONTANA

525 McKay

808 Rosebud

780 Roundup

809 No. 1

781 No. 2

811 No. 3

799 Uncorrelated

812 No. 4

805 Bull Mountain

814 No. 5

806 Mammoth

816 Belt Creek

807 Carpenter Creek

935 Dietz Nos. 1 and 2

NEVADA

799 Uncorrelated

NEW MEXICO

479	Blue	775	Gibson
488	No. 8	776	White Ash
507	Upper York Canyon	777	Hogback
771	Sugarite	778	Cook and White
772	Yankee	779	Carthage
773	Raton	785	Black Diamond
774	Aztec	799	Uncorrelated

NORTH DAKOTA

564	Harmon	575	Coteau
569	Beulah-Zap	799	Uncorrelated

OHIO

001	Various	087	Clarion
023	Waynesburg	095	Brookville
029	Sewickley	103	Lower Mercer
033	Redstone	121	Quakertown
036	Pittsburgh	285	Sharon
060	Harlem	882	Middle Kittanning and Upper Freeport
062	Anderson	884	Brookville and Lower Kittanning
070	Mahoning	928	Lower and Middle Kittanning
071	Upper Freeport	949	Pittsburgh and Sewickley
074	Lower Freeport	950	Anderson and Upper Freeport
080	Middle Kittanning	955	Pittsburgh and Redstone
084	Lower Kittanning		

OKLAHOMA

001	Various	552	Cavanal
473	Dawson	556	Stigler
490	Iron Post	558	McAlester
496	Croweburg	562	Upper Hartshorne
504	Mineral	563	Lower Hartshorne
507	Sequoyah	880	Lower and Upper Hartshorne
520	Pawpaw	911	Lower and Upper McAlester
527	Secor		

OREGON

799	Uncorrelated	837	Beaver Hill
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PENNSYLVANIA--BITUMINOUS

001	Various	036	Pittsburgh
023	Waynesburg	038	Little Pittsburgh
029	Sewickley	062	Bakerstown
033	Redstone	063	Lower Bakerstown

PENNSYLVANIA--BITUMINOUS--Continued

067	Brush Creek	883	Brookville and Upper Kittanning
070	Mahoning	884	Brookville and Lower Kittanning
071	Upper Freeport	885	Clarion and Lower Kittanning
074	Lower Freeport	886	Upper Kittanning and Lower Freeport
076	Upper Kittanning	887	Brookville and Middle Kittanning
080	Middle Kittanning	921	Redstone and Waynesburg
084	Lower Kittanning	924	Lower and Upper Kittanning
086	Upper Clarion	926	Lower Kittanning and Lower Freeport
087	Clarion	927	Lower Kittanning and Upper Freeport
095	Brookville	928	Lower and Middle Kittanning
103	Lower Mercer	937	Redstone and Sewickley
799	Uncorrelated	949	Pittsburgh and Sewickley
860	Middle and Upper Kittanning	952	Lower and Upper Freeport
880	Upper Kittanning and Upper Freeport		
881	Clarion and Middle Kittanning		
882	Middle Kittanning and Upper Freeport		

SOUTH DAKOTA

799 Uncorrelated

TENNESSEE

112	Rock Spring	256	Rex
126	Pewee	265	Morgan Springs
128	Walnut Mountain	270	Oakdale
129	Red Ash	286	Sewanee
134	Big Mary	295	Richland
135	Poplar Lick	312	Wilder
140	Upper Pioneer	320	Castle Rock
142	Buckeye Springs	326	Upper Bon Air
144	Jordan	327	Dade
147	Joyner	346	Upper White Oak
151	Jellico	366	Lower Sale Creek
157	Blue Gem	799	Uncorrelated
168	Coal Creek	878	Blue Gem and Jellico
212	Poplar Creek	911	Big Mary and Windrock
234	Hooper	918	Pewee and Red Ash

TEXAS

799 Uncorrelated

UTAH

001	Various	802	Lower Sunnyside
002	Various	820	Rock Canyon
799	Uncorrelated	825	Gilson
800	Sunnyside	830	Aberdeen

UTAH--Continued

832	Castle Gate B	850	Wasatch
834	Castle Gate C	851	Muddy No. 1
836	Castle Gate D	852	Ferron A
840	Subseam No. 1	853	Ferron J
842	Subseam No. 2	855	Blind Canyon
843	Subseam No. 2-1/2	856	Bear Canyon
844	Subseam No. 3	886	Hiawatha and Bear Canyon
846	Hiawatha	887	Castle Gate B and Subseam No. 1
848	Ivie	905	Castle Gate A and Castle Gate D
849	Upper Ivie	907	Castle Gate C and Castle Gate D

VIRGINIA--BITUMINOUS

001	Various	271	Upper Seaboard
104	High Splint	285	Lower Seaboard
111	Morris	302	Middle Horsepen
126	Pardee	341	Pocahontas No. 5
135	Phillips	344	Pocahontas No. 3
142	Low Splint	377	Brushy Mountain
151	Cedar Grove	379	Langhorne
152	Taggart Marker	866	Low Splint and Phillips
157	Upper Standiford	867	Taggart and Taggart Marker
165	Kelly	868	Clintwood and Upper Banner
168	Imboden	869	Splash Dam and Upper Banner
174	Clintwood	878	Darby and Harlan
176	Eagle	889	Lower and Upper Seaboard
177	Blair	890	Blair and Clintwood
178	Lyons	908	Harland and Low Splint
185	Dorchester	921	Lower and Upper Banner
189	Norton	929	Blair and Lyons
195	Hagy	930	Imboden and Taggart
210	Splash Dam	931	Eagle and Douglas
214	Upper Banner	945	Low Splint and High Splint
216	Lower Banner	969	Splash Dam and Kennedy
252	Kennedy	971	Kennedy and Raven
259	Raven	972	Imboden and Kelly
266	Jawbone	987	Dorchester and Splash Dam
268	Thick Tiller	988	Clintwood and Splash Dam
269	Tiller		

WASHINGTON

001	Various	405	No. 4
002	Various	406	No. 5
393	Blue Canyon	407	No. 6
394	Lake Whatcom	408	Dolly Varden
402	No. 1	410	Muldoon
403	No. 2	415	Sunbeam
404	No. 3	417	Discovery

WASHINGTON

423	Dale No. 4	479	No. 8
425	Dale No. 7	480	No. 10
431	Occidental No. 1	481	No. 11
432	Carbon	484	Blacksmith
434	Navy No. 6	487	Black Bear
436	Occidental No. 2	500	Ladd No. 3
440	Durham No. 2	799	Uncorrelated
441	Occidental No. 3	821	Big
444	Occidental No. 6	823	Roslyn
446	Occidental No. 14	824	Plant No. 6
447	Pocahontas	826	Bagley
448	Frazier	827	Dale
449	Ravensdale No. 9	828	McKay
451	Ravensdale No. 5	829	Jones
453	Ravensdale No. 4	831	Bellingham No. 1
455	Ravensdale No. 3	833	Roslyn No. 8
458	Elk No. 1	960	Bagley and May Creek
460	Elk No. 2	961	Roslyn and Big
465	Wilkeson No. 1	962	Roslyn and Roslyn No. 6
469	Morgan No. 7	973	Nos. 1 and 2
471	Crocker	982	Nos. 2 and 3
475	Nisqually	984	Nos. 3 and 4
478	No. 7		

WEST VIRGINIA

001	Various	154	Lower Cedar Grove
002	Various	157	Alma
023	Waynesburg	167	Peerless
029	Sewickley	168	No. 2 Gas
033	Redstone	170	Powellton
036	Pittsburgh	174	Matewan
055	Elk Lick	176	Eagle
063	Bakerstown	179	Little Eagle
070	Mahoning	195	Lower War Eagle
071	Upper Freeport	216	Gilbert
074	Lower Freeport	252	Douglas
076	Upper Kittanning	266	Jaeger
080	Middle Kittanning	285	Sewell
084	Lower Kittanning	293	Welch
087	Clarion	311	Beckley
103	Stockton-Lewiston	318	Fire Creek
111	Coalburg	334	Pocahontas No. 6
117	Buffalo Creek	341	Pocahontas No. 5
121	Winifrede	342	Pocahontas No. 4
135	Chilton	344	Pocahontas No. 3
136	Little Chilton	799	Uncorrelated
137	Hernshaw	873	Lower Cedar Grove and No. 2 Gas
151	Cedar Grove		

WEST VIRGINIA--Continued

888	Beckley and Sewell	944	Cedar Grove and Coalburg
891	Beckley and Fire Creek	946	Peerless and Sewell
894	Pocahontas No. 4 and Pocahontas No. 5	947	Chilton and No. 5 Block
895	Alma and No. 2 Gas	948	No. 5 Block and No. 2 Gas
896	Cedar Grove and Stockton-Lewiston	949	Pittsburgh and Sewickley
898	Eagle and Little Eagle	950	Bakerstown and Upper Fremont
899	Winifrede and Stockton-Lewiston	952	Lower Freeport and Upper Freeport
913	Cedar Grove and Lower Cedar Grove	955	Pittsburgh and Redstone
914	Sewell and Welch	956	Chilton and Cedar Grove
916	No. 5 Block and Cedar Grove	957	Chilton and No. 2 Gas
917	Douglas and Iaeger	958	No. 5 Block and Winifrede
919	Sewell and Fire Creek	959	No. 5 Block and Stockton-Lewiston
920	Pocahontas No. 6 and Fire Creek	960	Eagle and Powellton
922	Bens Creek and Gilbert	961	No. 2 Gas and Powellton
924	Lower and Upper Kittanning	963	Pocahontas No. 4 and Beckley
928	Lower Kittanning and Middle Kittanning	964	Eagle and No. 2 Gas
930	Cedar Grove and No. 2 Gas	965	Coalburg and No. 5 Block
931	Eagle and Douglas	985	Cedar Grove and Winifrede
932	Douglas and Bens Creek	989	Pocahontas No. 6 and Beckley
934	Hernshaw and No. 2 Gas	990	Pocahontas No. 3 and Beckley
937	Redstone and Sewickley	991	Pocahontas Nos. 3 and 6
939	Alma and Lower Cedar Grove	994	Pocahontas Nos. 3 and 4
940	Lower Douglas and Lower Iaeger	996	Pocahontas Nos. 6 and 9
943	Coalburg and Stockton-Lewiston	997	Pocahontas Nos. 3 and 5
		998	Pocahontas Nos. 10 and 11
		999	Pocahontas Nos. 10 and 12

WYOMING

001	Various	792	Rock Springs No. 7-1/2
002	Various	793	Rock Springs No. 9
506	Rock Springs No. 8	794	Rock Springs No. 7
520	Dietz No. 2	795	Rock Springs No. 10
522	Badger	796	Rock Springs No. 11
523	School	797	Rock Springs No. 15
691	Healy	798	Van Dyke
698	Dietz No. 1	799	Uncorrelated
701	Smith	801	Kemmerer
702	Arvada	803	Willow Creek
706	Felix	804	Hanna No. 1
708	Lower Ulm	817	Hanna No. 2
782	Adaville	818	Hanna No. 3
783	Monarch	819	Hanna No. 5
786	Masters	951	Smith and Roland
787	Roland	952	Manarch and Carney
788	Rock Springs No. 5	953	Rock Springs Nos. 1 and 3
789	Rock Springs No. 4	954	Rock Springs Nos. 10 and 15
790	Rock Springs No. 3	955	Hanna Nos. 2 and 79-A
791	Rock Springs No. 1		

APPENDIX D.--GLOSSARY

Resources.--Concentrations of coal in such forms that economic extraction is feasible or may become feasible.

Identified resources.--Specific bodies of coal whose location, rank, quality, and quantity are known from geologic evidence supported by engineering measurements. They include measured, indicated, and inferred resources.

Measured resources.--Coal for which estimates of the rank, quality, and quantity have been computed, within a margin of error of less than 20 percent, from sample analyses and measurements from closely spaced and geologically well-known sample sites.

Indicated resources.--Coal for which estimates of the rank, quality, and quantity have been computed partly from sample analyses and measurements and partly from reasonable geologic projections.

Inferred resources.--Coal in unexplored extensions of measured and indicated resources for which estimates of quality and size are based on geologic evidence and projection.

Demonstrated reserve base (DRB).--The sum of measured and indicated coal resources from which reserves are calculated. Includes beds of bituminous coal and anthracite 28 or more inches in thickness, and subbituminous beds 60 or more inches in thickness that occur to 1,000-foot depths. Includes thinner and/or deeper beds that are presently being mined or for which evidence exists that they could be mined commercially at this time. Includes lignite beds 60 inches or more in thickness that can be surface-mined; these beds are no greater than about 120 feet deep.

Proximate analysis.--In the case of coal and coke, the determination, by prescribed ASTM methods, of moisture, volatile matter, fixed carbon (by difference), and ash.

Ultimate Analysis.--The determination of carbon and hydrogen in coal as found in the gaseous products of its complete combustion, the determination of sulfur, nitrogen, and ash in the coal as a whole, and the estimation of oxygen by difference.

Volatile combustible matter (VM).--That part of the combustible matter of coal and coke that is driven off when coal is heated in a closed vessel, chiefly compounds of hydrogen and carbon.

Fixed carbon (FC).--The solid residue, other than ash, obtained by destructive distillation of coal and coke under prescribed laboratory methods; that is,

$$FC = 100 - (\text{the sum of moisture } M, \text{ VM, and ash}).$$

Ash.--The inorganic residue remaining after ignition of coal and coke under prescribed laboratory conditions.

Ash-softening temperature.--The temperature ($^{\circ}$ F) at which a small core of coal ash has fused down into a spherical lump after being heated in a furnace under prescribed laboratory conditions.

Moisture, air-dried.--Moisture retained in coal and coke after air drying under standard laboratory conditions.

Moisture, as-received.--Calculated from air-dried analysis as follows:

$$\text{Moisture as rec.} = \text{moisture} \times \frac{(100 - \text{air-dried loss})}{100} + \text{air-dried loss.}$$

Dry basis.--An analysis expressed on the basis of a coal sample from which the total moisture has in theory been removed; that is,

$$\text{Vol matter, dry} = \text{vol matter} \times \frac{100}{(100 - \text{moisture})}.$$

Dry, mineral-matter-free basis.--An analysis expressed on the basis of a coal sample from which the total moisture and the mineral matter (1.1 ash + 0.1 sulfur) have in theory been removed.

Sulfur.--In coal, occurs as iron pyrite (FeS_2) and organic sulfur. The organic sulfur is chemically combined with other compounds and cannot be removed by existing coal-cleaning processes. Portions of the pyritic sulfur can be removed in coal-cleaning processes.

Free-Swelling index (FSI).--A small-scale laboratory test for obtaining information regarding the free-swelling properties of a coal. The results may be used as an indication of the coking characteristics of the coal when burned as a fuel. In ASTM designation D-720-57, FSI ranges from indices of 1 through 9 (no swelling to high swelling).

Hardgrove grindability index.--ASTM designation D-409-51--a laboratory test to determine the relative grindability or ease of pulverizing coals in comparison with a coal chosen as 100 grindability.

Coke.--A coherent, cellular structured solid, primarily of amorphous carbon, obtained by the destructive distillation of certain bituminous coals.

Coking coal.--Bituminous coal that, when heated in the absence of air above its decomposition temperature, softens, swells, fuses, and finally run together to form porous masses.

Metallurgical coke.--Produced from bituminous coking coal generally containing less than 1.25 percent sulfur and 8 percent ash. Excess sulfur and ash contaminate metals and must be removed at the expense of decreased iron and steel production.

Specific gravity.--The ratio of the weight of any volume of a substance compared to the weight of an equal volume of pure water at 4° C.

Washability studies.--Standard tests in which raw coals are sized and separated in liquids of varying specific gravities ranging from 1.30 to 1.80 specific gravity. Coal floats and impurities sink with coal purity increasing as specific gravity decreases. Tests provide data on the quality and quantity of coal that can be recovered.

Blending coals.--Usually, medium- and low-volatile bituminous coals that can be mixed with high-volatile coking coals to improve coke quality and physical strength.

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